Courses taught in foreign languages in academic year 2023/24

Content

E-learning courses for Midwife, General Nurse, Physiotherapy and Occupational Therapy ... 5
Nursing Care in Obstetrics I. ... 5
Nursing Care in Neonatology ... 5
Biomechanics of the movement – practical use of instruments ... 5
Selected chapters from biophysics and biomechanics – part 1 ... 5
Selected chapters from biophysics and biomechanics – part 2 ... 5
Myofascial syndrome – triggerpoints therapy ... 6
The examination and therapy of the pelvis and spine according to Prof. Lewit ... 6
MIDWIFE ... 7
Winter Term ... 7
Professional Conversation in English ... 7
Professional Conversation in German ... 8
Nursing Care in Gynaecology I ... 8
General and Developmental Psychology ... 10
First Aid ... 11
General, developmental psychology ... 11
Lactation counseling ... 13
Antenatal preparation in the work of a midwife ... 14
Rehabilitation in Midwifery ... 15
Microbiology and Immunology ... 16
Reproductive Health Education ... 17
Primary and community care in midwifery ... 18
Microbiology and Immunology ... 19
Public Health Care and Health Protection ... 20
Practical bio-statistics ... 21
Physiology ... 22
Principles of bio-research ... 23
Summer Term ... 24
Nursing care in gynaecology II. ... 24
Preparing a woman for childbirth ... 25
Practical bio-statistics ... 26
Healthy lifestyle and nutrition ... 27

Midwifery skills I. 28
Biophysics 29
Medical law and professional legislation 30
Principles of bio-research 31
GENERAL NURSE 32
Winter Term 32
English language 32
General, developmental psychology 33
English language 34
Physiology 35
Medical psychology 36
English language 38
Medical law and professional legislation 39
English language 40
German language 41
Psychology 42
Public Health Care and Health Education 43
Practical bio-statistics 44
Principles of bio-research 45
Information Systems in Health Care 46
Summer Term 47
English language - professional terminology 47
German language - professional terminology 48
Practical bio-statistics 49
Physiology 50
Principles of bio-research 51
OCCUPATIONAL THERAPY 58
Winter Term 58
English language I 58
German language I 59
Therapeutic Techniques and Activities I 59
Introduction to Occupational Therapy 60
Art Therapy I 61
Winter Skiing Course 63
Art Therapy I 64

Surgery And Traumatology 65
ERGOTHERAPY IN NEUROLOGY 66
Psychology 67
Music Therapy 68
Kinesiology II 69
Practical bio-statistics 70
REHABILITATION OF COGNITIVE FUNCTIONS 71
Principles of bio-research 72
Summer Term 73
German language II 73
Therapeutic Techniques and Activities II 74
The Theory of Occupational therapy 75
Art Therapy II 76
Information Systems 77
Medical psychology 78
The Investigation Methods II 79
Ergotherapy In Geriatrics 80
KINESIOLOGY I 81
Summer Cycling Course 82
Practical bio-statistics 83
Principles of bio-research 84
ERGONOMICS 85
ERGODIAGNOSTICS AND WORKING REHABILITATION 86
PROSTHETICS 87
RESEARCH METHODS IN ERGOTHERAPY 88
ORTHOPEDICS AND PROTETHICS 89
PHYSIOTHERAPY 90
Winter Term 90
Physiotherapy I 90
Physiotherapy III 91
Winter Skiing Course 92
Biophysics 93
Psychology 94
Psychology 95
Methods of Kinesiotherapy I 96

Ergotherapy 97
Social and occupational rehabilitation 98
Medical Psychology 99
The Basics Of Health Law 100
General Neurophysiology 101
Physical Education and Didactics I 102
Psychology 103
Physical Therapy I 104
Kinesiology methods 105
Summer Term 106
English language I 106
German language I 107
Summer Cycling Course 108
Biomechanics 109
Information Systems 110
Orthopedics And Protethics 111
Research Methods In Physiotherapy 112
Clinical psychology 113
Physical Therapy II 114
MEDICAL RESCUE 115
WINTER TERM 115
Anatomy 115
Biochemistry, hematology and transfusion medicine 117
Microbiology, epidemiology and hygiene 119
PhDr. Oľga Jarabicová, PhD. 120
Professional experience II 121
Emergency medicine I 122
MEDICAL RESCUE 124
Summer Term 124
Integrated rescue system 124
Professional experience I 126
Transcultural nursing 128
Medical psychology 129
Professional course II 130
Emergency Medicine II 131

Basics of medical research 132
Basics of medical management 133
Medical technology 134

E-learning courses for Midwife, General Nurse, Physiotherapy and Occupational Therapy

Faculty:	Faculty of Health Studies
Course title:	**Nursing Care in Obstetrics I.**
Course code:	**KPAS/PP1P9**
Level of course:	bachelor
ECTS:	3
Teacher:	Doc. MUDr. Blanka Vavřinková, CSc.
Term:	summer
Language of instruction:	English

Faculty:	Faculty of Health Studies
Course title:	**Nursing Care in Neonatology**
Course code:	**KPAS/PNEP9**
Level of course:	bachelor
ECTS:	2
Teacher:	MUDr. Martin Pánek
Term:	summer
Language of instruction:	English

Faculty:	Faculty of Health Studies
Course title:	**Biomechanics of the movement – practical use of instruments**
Course code:	**KF/BMER**
Level of course:	bachelor
ECTS:	5
Teacher:	Mgr. Marek Jelínek, Ph.D.
Term:	winter, summer
Language of instruction:	English

Faculty:	Faculty of Health Studies
Course title:	**Selected chapters from biophysics and biomechanics – part 1**
Course code:	**KFE/BI1ER**
Level of course:	bachelor
ECTS:	5
Teacher:	Ing. Martin Svoboda, Ph.D.
Term:	winter, summer
Language of instruction:	English

Faculty:	Faculty of Health Studies
Course title:	**Selected chapters from biophysics and biomechanics – part 2**
Course code:	**KFE/BI2ER**

Level of course:	bachelor
ECTS:	5
Teacher:	Ing. Martin Svoboda, Ph.D.
Term:	winter, summer
Language of instruction:	English

Faculty:	Faculty of Health Studies
Course title:	**Myofascial syndrome – triggerpoints therapy**
Course code:	**KF/MYOFS**
Level of course:	bachelor
ECTS:	5
Teacher:	Mgr. Marek Jelínek, Ph.D.
Term:	winter, summer
Language of instruction:	English

Faculty:	Faculty of Health Studies
Course title:	**The examination and therapy of the pelvis and spine according to Prof. Lewit**
Course code:	**KE/EXTL**
Level of course:	bachelor
ECTS:	5
Teacher:	Mgr. Marek Jelínek, Ph.D.
Term:	winter, summer
Language of instruction:	English

MIDWIFERY

Winter Term

Faculty:	**Faculty of Health Studies**
Course title:	***Professional Conversation in English***
Course code:	KPAS/ AJP9
Level of course:	bachelor
ECTS:	2
Teacher:	Bc. Pavel Prchal
Term:	Winter
Language of instruction:	English
Lectures/exercises:	0/2
Requirements on student:	written test and oral exam
Course goal:	The course includes all important parts of language training: oral and written language manifestation, text understanding, reading and pronunciation training, special vocabulary training covering the following topics:
Content:	Seminar Topics: 1. week: Nursing as a Profession 2. week: The Types of Nursing Positions 3. week: Midwifery 4. week: Reproductive System 5. week: Pregnancy 6. week: Normal Human Childbirth 7. week: Childbirth Complications 8. week: Nurse-Patient Communication

Faculty:	**Faculty of Health Studies**
Course title:	***Professional Conversation in German***
Course code:	KPAS/ NJP9
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Vratislava Postlová, Ph.D.
Term:	Winter
Language of instruction:	German
Lectures/exercises:	0/2
Requirements on student:	written test and oral exam
Course goal:	The course includes studying of a foreign language for intermediate students with the focus on professional language in health care. The aim is skill development enabling professional communication, reading and understanding of foreign special tests. Students will work with Czech and international professional publications and they will be able to communicate in a foreign language environment.
Content:	Seminar Topics: 1. week: Schwangerschaftsvorsorge I. 2. week: Schwangerschaftsvorsorge II. 3. week: Geburt I. 4. week: Geburt II. 5. week: Wochenbett 6. week: Stillen 7. week: Deutschland vs. Tschechien 8. week: Praktisches Vokabular
Faculty:	Faculty of Health Studies
Course title:	**Nursing Care in Gynaecology I**
Course code:	**KPAS/ PG1P9**
Level of course:	bachelor
ECTS:	3
Teacher:	MUDr. Martina Pražáková
Term:	winter
Language of instruction:	English
Lectures/exercises:	2/0
Requirements on student:	Obligatory presence at the seminars, passing controlling tests, a project assignment on a given nursing topic, an oral exam.
Course goal:	The subject is designed as a theoretical and practical unit for the birth assistants who are taking care of a woman throughout her life. The subject is a part of a complex set of basic specialized subjects for the field of midwifery which provides the students with the latest knowledge and information from the clinical field of gynaecology. The focus is put on the primary prevention which is an important part of the work of a birth assistant to care after the health of women of all ages being healthy and ill. The subject covers those pathophysiological states which are the most important for the quality of a female life. Nursing care is being taught in a form of a nursing process regarding the individuality of each woman. It follows the knowledge of clinical gynaecology, urogynaecology, oncogynaecology, gynaecology in childhood. The aim of the subject is to develop the skill to apply the knowledge in a real contact with women.
Content:	**Lecture Topics:** 1. week: The life periods of a woman, the development of female genitals and their defects 2. week: Vulva, vagina, pelvic bottom, cervix, uterus 3. week: Oviducts, ovaries, breast 4. week: Menstruation and ovulation cycle, neurohumoral regulation of the menstruation and ovulation cycle 5. week: The disorders of the menstruation cycle 6. week: Examination methods in gynaecology 7. week: Urogynaecology 8. week: Nonvirulent tumors of female genitals 9.

	week: Malignant tumours of female genitals (cervix, the body of the uterus, oviduct) 10. week: Malignant tumours of female genitals (vulva, vagina, ovarium, breasts) 11. week: Inflammation disorders of the reproductive organs, endometriosis 12. week: Climacterium 13. week: Anticonception, a planned parenthood 14. week: Irregular positions of female genitals 15. week: Basic operation techniques in gynaecology

Faculty:	**Faculty of Health Studies**
Course title:	***General and Developmental Psychology***
Course code:	KPAS/ PSP9
Level of course:	bachelor
ECTS:	2
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	1/1
Requirements on student:	written test
Course goal:	Subject creates the basis for other psychological disciplines. It introduces the students with psychology application in the field of nursing and care, the rules of spiritual life, the behaviour and the discourse of an individual with the dynamics and structure of a character. The aim is also to teach basic terminology and problems of general psychology and methodological approaches.
Content:	**Lecture Topics:** 1. week: The subject and tasks of general psychology. Determination of a human psyche 2. week: Reception, imagination, fantasy 3. week: Thinking and speech 4. week: Intelligence, mental retardation 5. week: Memory, attention 6. week: Emotions 7. week: Motivational processes, needs and their satisfaction 8. week: Stances, character 9. week: Personality typology 10. week: Psychological methods and their application in nursing training 11. week: Prenatal period, a new-born, a baby, a toddler 12. week: Pre-school and younger school age 13. week: Adolescence period 14. week: Adulthood period 15. week: The issues of the elderly

Faculty:	**Faculty of Health Studies**
Course title:	***First Aid***
Course code:	KPAS/ PPP9
Level of course:	bachelor
ECTS:	2
Teacher:	PhDr. Mgr. et Mgr. Patrik Christian Cmorej, PhD.
Term:	Winter
Language of instruction:	English
Lectures/exercises:	0/2
Requirements on student:	written test and oral exam
Course goal:	The subject is designed as theoretical - practical and is part of a group of subjects based on clinical practice. Students will acquire knowledge, skills and principles for providing lay and pre-medical first aid for acute and health-threatening conditions that have arisen as a result of an accident or due to a sudden worsening of an illness. Students are introduced to clinical conditions that immediately threaten a person's life, including specific procedures that lead to their rescue. Part of the subject is knowledge about the legal and organizational issues of providing first aid, about the organization of disaster medicine, emergency care and crisis management.
Content:	Exercise topics: 1. Integrated rescue system, crisis management, disaster medicine, legislation. 2. Organization of pre-hospital emergency care. General principles and procedures for providing first aid, emergency resuscitation algorithm for adults, children and newborns. 3. Head injury. Unconsciousness. Injury to the spine, joints and bones. 4. Injuries to the chest and abdomen. Bleeding. Rival. 5. Effects of heat and cold on the human organism. Corrosion. 6.Injury by electric current. 7. First aid for sudden internal conditions. 8. Bandaging technique, wound care, stopping bleeding. 9. Immobilization techniques. Positions of the injured. Transport. 10. Crass syndrome. Blast syndrome. Poisoning. 11. Drowning. Choking. Anaphylactic shock. 12. Injury by an animal, insect.

Faculty:	Faculty of Health Studies
Course title:	**General, developmental psychology**
Course code:	**KPAS/ PSP5**
Level of course:	bachelor
ECTS:	2
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	Winter
Language of instruction:	English
Lectures/exercises:	2/2
Requirements on student:	Written test
Course goal:	The subject forms the basis from which other psychological disciplines are based. It introduces students to the use of psychology in the field of nursing, to the laws of the mental life, behavior and manifestations of an individual, to the dynamics and structure of personality. Emphasis is placed primarily on the interpretation of central concepts and problems of general psychology and on methodological approaches.

Content:	Week 1: Subject and tasks of general psychology. Determination of the human psyche Week 2: Perception, imagination, fantasy Week 3: Thinking and Speaking Week 4: Intelligence, mental retardation Week 5: Memory, attention Week 6: Emotions Week 7: Motivational processes, needs and their satisfaction Week 8: Attitudes, character Week 9: Typology of personality Week 10: Methods of psychology and their use in nursing practice Week 11: Prenatal period, newborn, infant, toddler Week 12: Preschool and younger school age Week 13: Adolescence Week 14: Adulthood 15th week: Issues of the elderly

Faculty:	**Faculty of Health Studies**
Course title:	***Lactation counseling***
Course code:	KPAS/ LPDK2
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Miroslava Zemanová, Ph.D.
Term:	Winter
Language of instruction:	English
Lectures/exercises:	4/0
Requirements on student:	Written test
Course goal:	The subject follows on from the subject Nutrition in Pediatrics and is designed as theoretical and practical. Provides students with basic knowledge and skills in the field of breastfeeding development and support. The student will be able to give the mother enough information about the benefits of breastfeeding, as well as practical help, after giving birth. The acquired knowledge and skills are fully within the competence of the pediatric nurse.
Content:	1. Recommended practices regarding breastfeeding support. Factors affecting breastfeeding. 2. Preparing a woman for breastfeeding. Breast care. 3.Breastfeeding technique. Principles of correct breast grasping and sucking. 4. Breastfeeding problems. Spraying. Alternative feeding methods. Self-study: Anatomy and physiology of the mammary gland. Physiology of lactation.

Faculty:	**Faculty of Health Studies**
Course title:	***Antenatal preparation in the work of a midwife***
Course code:	KPAS/ PPAP9
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Kamila Bitalová
Term:	Winter
Language of instruction:	English
Lectures/exercises:	0/12
Requirements on student:	80% active attendance, passing of the credit seminar work - preparation of the methodology of prenatal preparation.
Course goal:	The subject has been made as a theoretical unit for midwifes who will become knowledge in the field of psychoprophylaxis for women. The subject is part of a complex of basic vocational subjects for the field midwifery. It acquaints students with the concept of pre-natal care during pregnancy of a woman, with theoretical-educational areas of preparation for childbirth and leading of pre-natal courses. The aim of the subject is the ability of the student to apply the acquired knowledge in real contact with women during their psychoprophylaxis for childbirth and in leading birth courses.
Content:	Exercise Topics: 1. The importance of psychoprophylaxis for woman and her motherhood, historical knowledge of Pre-natal preparartion development in the world and in the Czech Republic. 2. Determination of suitable topics for the preparatory course - structure and management of prenatal courses, methodology of courses, areas of interest (pregnancy, childbirth, puerperium, lactation counseling, care for newborns). 3. Psychoprophylaxis of women in individual trimesters of pregnancy. 4. Psychophysical preparation of woman PA during I. and II. trimester, introduction to pregnancy, changes in pregnancy. 5. Psychophysical preparation of woman PA during III. trimester and childbirth. 6. Psychoprophylaxis of women in postpartum period.

Faculty:	**Faculty of Health Studies**
Course title:	***Rehabilitation in Midwifery***
Course code:	KPAS/ REHP9
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Alena Charvátová, Ph.D.
Term:	Winter
Language of instruction:	English
Lectures/exercises:	12/12
Requirements on student:	80% attendance at seminars, continous proof of practical skills, practical demonstration of selected exercise unit - by pregnant, puerperium and by urinary incontinence. Exam: written test - demonstrating overview and orientation in this issue.Exam: oral exam.
Course goal:	The course is conceived as theoretical - practical with a predominance of practical activities. The midwifery course provides the acquisition of professional knowledge and skills related to rehabilitation work and midwife work. The aim of the course is to provide students with comprehensive information on health, social and economic issues, which are aimed at improving or maintaining the functional fitness of women. The acquired professional skills will be used by students to create a rehabilitation plan for women of all ages with a special focus on pregnancy and postpartum period.
Content:	Lecture Topics: 1. Rehabilitation in the prevention of urinary incontinence - fitness and relaxation techniques SPD. Rehabilitation during pregnancy and puerperium. 2. Rehabilitation in premenstrual syndrome. 3. Rehabilitation in the period of climacterium. 4. Rehabilitation after gynecological operations, preoperative preparation, postoperative movement program. Rehabilitation in women after breast surgery - scar treatment, self-examination echniques, movement program during hospitalization and convalescence. 5. Selected concepts of basal stimulation 6. Selected concepts of basal stimulation. Seminar Topics: 1. Rehabilitation plan of pregnant women in individual trimesters 2. Rehabilitation plan in the puerperium, movement program - diastasis of the abdominal muscles, symphezeolysis. 3. Rehabilitation plan - exercises for women after breast surgery - preoperative preparation, period of hospitalization, recovery period - use of thera-band. 4. Practical training of selected concepts of basal stimulation. 5. Practical training of selected concepts of basal stimulation. 6. Keeping exercise units students according to the teacher's assignment.

Faculty:	**Faculty of Health Studies**
Course title:	***Microbiology and Immunology***
Course code:	KPAS/ PKEK5
Level of course:	bachelor
ECTS:	5
Teacher:	Mgr. Miroslava Zemanová, Ph.D.
Term:	Winter
Language of instruction:	English
Lectures/exercises:	5/2
Requirements on student:	Students can gain the credit showing at least 80% active seminar participation and demonstrating the knowledge of mentioned issues in a written form. Exam is carried out in an oral form.
Course goal:	The subject serves as a clinical discipline introducing the students in a theoretical way with particularly psychological issues of the disorder and desease, autoplastic image of the desease, hospitalization issues, psychology of pain, types of disability and psychological attitude towards the clients dying from the view of psychology and professional deformation issues. In practical area the goal of the subject is to develop the skills approaching the clients.
Content:	Lecture Topics: 1. consultation: Psychological issues of the disorder and desease. Psychosomatic and somatopsychic relations, autoplastic image of the desease. Experiencing disorder within the time, the attitude of the patient to the desease. The categories of patients from psychological point of view, iatropatogenie, sororigenie and egrotogenie. 2. consultation: Professional deformation: burn-out syndrome development danger. Stress. Psychology of pain, anxiety, fear and feeling of inferiority. Types of disability and psychological approach towards the clients. Seminar Topics: 2. consultation: Illness/desease/disorder as a difficult life situation; Communication with a patient. Communication within a client's social network. Productive behaviour and its manifestations. Self-Study: The principles of professional behaviour.

Faculty:	**Faculty of Health Studies**
Course title:	***Reproductive Health Education***
Course code:	KPAS/ MIIV5
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Kamila Bitalová
Term:	Winter
Language of instruction:	English
Lectures/exercises:	18/0
Requirements on student:	Attendance 80% at seminars, submission of the seminar work, credit test passing for min. 75% Exam: oral exam.
Course goal:	The course is conceived as theoretical and practical. It introduces students to the philosophy of individual and family health with emphasis on reproductive health. It emphasizes one of the basic functions of a midwife in society, which is educational activity in the framework of health promotion, planned parenthood, prevention of disease and possible complications. It prepares the student for one of the basic competencies of sex education, education for responsible partnership and parenting. It informs about methods and procedures of sex education with regard to the diversity of age groups, students prepare individual topics of education for individual developmental periods throughout the life of the individual.
Content:	Seminar Topics: 1. Health 2020 Program and Reproductive Health. Sexual and reproductive health in the Czech Republic. Sexual and reproductive rights of men and women. Children's rights. Sexual education. Gender. Sex education in individual developmental periods. Education for partnership. 2. Sexual behavior in childhood, child sexuality. Sexual behavior in adolescence. Identification with the Role of woman, man. Differences between sexuality of man and woman. 3. Contraception. Family planning. Identification with the role of mother. Sexuality in pregnancy and after birth. 4. Sexual behavior in adulthood and old age. STD. Sexual needs in illness. 5. Sexual disorders in men, women. 6. Methods of education for sexual and reproductive health. Social marketing.

Faculty:	**Faculty of Health Studies**
Course title:	***Primary and community care in midwifery***
Course code:	KPAS/ PK1P5
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Kamila Bitalová
Term:	Winter
Language of instruction:	English
Lectures/exercises:	3/0
Requirements on student:	Obligatory presence at the seminars, passing controlling test.
Course goal:	The subject is a core discipline and it is a part of a group of subjects from the midwifery. The significant part of the subject is focused on a primary care, its organization in our health care system and the position of a midwide in an ambulatory care. Considering community care the focus is put on the individual work in a community and cooperation with a woman and her family. The focus is also put on the education in the areas of a planned parenthood, prevention of transmittable diseases, medical education and other programmes, which are important for the health of the whole community. In the area of community care the students will work with other subjects aiming at adapting specialized care based on the needs of the members of the community, in particular, a woman and her family.
Content:	Seminar Topics: 1. week: The system of primary care for a woman in the Czech Republic, the position of a midwife in a primary care 2. week: The importance of education in prevention of inflammatory gynaecological disorders 3. week: Physical examination in evaluation of the overall state of a woman 4. week: Education of a woman in the area of planned parenthood 5. week: The care after a woman undergoing ambulatory operation, problems of nursing care, intervention 6. week: The importance of education in prevention of oncogynaecological disorders. The role of a birth assistant 7. week: A midwife's activity in an ambulance of a child's gynaecology 8. week: A visiting midwife for a primary gynaecological care, the extent of care

Faculty:	**Faculty of Health Studies**
Course title:	***Microbiology and Immunology***
Course code:	KPAS/ MIIV5
Level of course:	bachelor
ECTS:	3
Teacher:	Mgr. Miroslava Zemanová, Ph.D.
Term:	Winter
Language of instruction:	English
Lectures/exercises:	2/1
Requirements on student:	Obligatory lecture attendance, a written test (75% success rate), a visit to a microbiologic and an immunologic laboratory
Course goal:	The subject is a set of topical units. Students will get basic knowledge in the fields of microbiology and immunology, which is an important background for studying epidemiology, hygiene and health education, all parts of public health care, and also health care and prevention of nosocomial infection. The study is focused on the basics of medical microbiology: general and special; bacteriology, virology, and parasitology, mycology and basics immunology: immune system, immunity, microbiologic and immunologic laboratory methods, clinical immunology.
Content:	Lecture Topics: 1. week: Microbiology: the definition of the field, classification of micro-organisms, microorganisms and human organism 2. week: The classification of micro-organisms, the classification of bacteria, the structure of a bacterial cell, the physiology of a bacterial cell, the crowth and procreation of bacteria, pathogenesis and virulence of bacteria 3. week: Bacterial toxins, antimicrobial substances, resistance 4. week: Characteristics and classification of viruses, interaction of viruses and cells, mechanisms of viral infection and their treatment 5. week: Mycology, parasitology, special bacteriology: coccuses and coccubacilluses 6. week: Aerobic and anaerobic sticks, enterobacteria, spirochets, chlamydia 7. week: Special virology 8. week: Immunology: definition of the field: immune system, immunity 9. week: Immunization. Clinical immunology Seminar Topics: 1. week: The sampling of biologic material 2. week: Laboratory microbiologic diagnostics, sensitivity to antibiotics 3. week: Serological laboratory diagnostics 4. week: A visit to a microbiological laboratory 5. week: A visit to a immunological laboratory 6. week: A visit to a microbiological laboratory 7. week: A visit to a immunological laboratory 8. week: Creating and presenting a seminar project on selected topics 9. week: Creating and presenting a seminar project on selected topics

Faculty:	**Faculty of Health Studies**
Course title:	***Public Health Care and Health Protection***
Course code:	KPAS/ VZP9
Level of course:	bachelor
ECTS:	3
Teacher:	PhDr. Olga Jarabicová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	2/2
Requirements on student:	Obligatory attendance of the lectures, a test with a minimum of 75% passing level, submitting and presentation of a seminar project: the intervention program.
Course goal:	The subject is a topical unit providing the students with the basic knowledge from the fields of epidemiology, hygiene, health education, which is an important part of public health care. It is the knowledge which is necessary for the protection and support of public health; it helps the understanding of the connections between clinical and preventive medicine and midwifery. It also covers the prevention of professional injuries of the medical staff and nosocomial infections.
Content:	**Lecture Topics:** 1. week: Health, the aspects of health, the determinants of health, health protection and support, the prevention of disorders/diseases/disorders 2. week: International documents about health protection and support. Health 21 3. week: Public health care: the focus, content, segments, realization in training 4. week: The epidemiology of infectious diseases: general facts; epidemiological measures 5. week: The groups of transmissive infections; the examples of infections 6. week: Environment and health; health preventive and protecting measures 7. week: Work environment and health; health protection 8. week: The epidemiology of chronical diseases and their prevention 9. week: Hygiene in medical facilities. Nosocomial infections and their prevention 10. week: Health education: sims, methods and forms 11. week: The activities of a birth assistant in the area of health education **Seminar Topics:** 1. week: Questionnaire 2. week: Intervention program 3. week: Group work 4. week: Information: medical education flyer on the topic 5. week: Personal hygiene and hand washing of a medical staff 6. week: Laundry operations in a medical facility 7. week: Trash and garbage operations in a medical facility 8. week: The evaluation of health risks, work and protection of health categorization for a medical staff 9. week: Disinfection and sterilization 10. week: The presentation of seminar projects 11. week: The presentation of seminar project

Faculty:	**Faculty of Health Studies**
Course title:	***Practical bio-statistics***
Course code:	KFE / 1PBS
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	0/2
Requirements on student:	exam
Course goal:	Analysis of bio-statistical data using specialized SW.
Content:	Statistical analysis can be provided by more or less specialized SW. The free product "R" is used in this course. Students first learn how to manage the data. Then the basic descriptive characteristics are performed and the classical analytical statistical tools employed to test and to model dependencies among variables. The course is taught in English. Preliminary theoretical knowledge of statistics is not required. The course ends with the practical analysis of bio-statistical data. 1. FW R-project. Downloading, basic principles, menus, help. 2. R-project. Inserting, re-calculating and saving the data. 3. Types of variables. Categorical variable – frequencies. 4. Continuous variable – quantile and moment characteristics. 5. Computer testing with the use of p-values. 6. Categorical variables – bivariate contingency tables, chi2-test of independency. 7. Continuous variables – t-tests. 8. Analysis of variance (ANOVA) – models and tests. 9. Regression models (1) – simple regression and correlation. 10. Regression models (2) – multiple regression. 11. Time series – description, models and forecasting. 12. Cluster analysis (distance measures, k-means clustering). 13. Survival analysis (survival function, tests, Cox regression).

Faculty:	**Faculty of Health Studies**
Course title:	***Physiology***
Course code:	KE / FZEK9
ECTS:	4
Level of course:	bachelor
Teacher:	MUDr. Tomáš Novotný, Ph.D., MBA
Term:	winter
Language of instruction:	English
Lectures/exercises:	18/6
Requirements on student:	Credit: active participation in classes, passing written tests - 75% success in individual tests. Exam: oral exam.
Course goal:	The subject is a part of a complex of basic theoretical subjects profiling the base of the study program and its content follows on the knowledge gained in anatomy. The aim of the course is to understand the basic physiological functions of the human organism (cell physiology and individual body organs, basic physiological manifestations of the organism, physiology of stress response in the sense of danger, fear and anxiety, emphasis is placed on the physiology of the locomotor system).
Content:	Lecture Topics: 1st consultation: Cell physiology and internal environment, striated muscle physiology and muscle movement. Physiology of blood and immune system. 2nd consultation: Physiology of respiratory system, circulatory system with focus on management principles. 3rd Consultation: Physiology of the digestive system, physiology of the urogenital system, focusing on the physiology of glomerular filtration and tubular processes. Physiology of endocrine glands. Seminar Topics: 1st consultation: Physical load physiology, blood, group antigens. Static and dynamic lung volumes, adaptation of breathing to altered conditions, monitoring of external manifestations of cardiac activity. 2nd consultation: Transformation of substances and energy - energy balance of the organism, physiology of the urogenital system with a focus on excretory pathways. Self-study: Physiology of smooth muscle tissue, physiology of cardiac muscle. Physiology of the peripheral part of the cardiovascular system - physiology of the arterial bed, venous bed. Physiology of the reproductive tract. 14. Nutrition Physiology.

Faculty:	**Faculty of Health Studies**
Course title:	***Principles of bio-research***
Course code:	KFE / 1PBR
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	1/0
Requirements on student:	exam
Course goal:	Basic principles of scientific research with an emphasis on healthcare science
Content:	The aim of the course is to introduce the basic principles of scientific research to students to enable them to carry out independently all the essential steps at the level required for their thesis as well as other future scientific activities, mainly in the field of healthcare sciences. The course is taught in English. The course ends with an oral exam. 1. Basic and applied research. Steps of the research project. 2. Research and search. Ethical aspects of bio-research (informed consent). 3. Clinical trials – types and examples (database ClinicalTrials.gov, EudraCT). 4. Clinical studies – types and examples (case report, case-control, cohort study). 5. Statistical survey – types and examples. 6. Statistical units, population parameters, statistical sample, representativeness. 7. Construction of questionnaire – types of variables (qualitative, quantitative, scales). 8. Interpretation of descriptive characteristics (frequencies, moments, quantiles). 9. Visualization of statistical results (tables, graphs). 10. Principles of statistical testing (research and statistical hypothesis, p-value). 11. Citations versus plagiarism. 12. Scientific journal database on internet (SCOPUS). 13. Impact factor. Database Web of Science.

Summer Term

Faculty:	**Faculty of Health Studies**
Course title:	***Nursing care in gynaecology II.***
Course code:	KPAS/ PG2P9
Level of course:	bachelor
ECTS:	3
Teacher:	Mudr. Martina Pražáková
Term:	summer
Language of instruction:	English
Lectures/exercises:	2/0
Requirements on student:	Obligatory seminar attendance, passing controlling tests, a project assignment on a given medical topic, an oral exam.
Course goal:	The subject is designed as a theoretical and practical unit for the birth assistants, who are caring after a woman during her life. The subject is a part of the complex set of basic specialized subjects in the field of midwifery, which introduces the students with the newest facts from the clinical gynaecology. The attention is put on the primary prevention, which is an important role of the birth assistant when caring after a woman during all age periods while being healthy and ill. Regarding the pathophysiological states the subject is focused on those, which are the key for the quality of a female life. The facts from the clinical gynaecology, urogynaecology, oncogynaecology, gynaecology of children are then followed by the nursing care, which is provided by means of a nursing process taking into consideration the individuality of each specific woman. The aim of the subject is to develop the skill to be used in a real contact with women
Content:	1. week: Care after a woman after epidural analgesia 2. week: Care after a woman after laparoscopic operation 3. week: Care after a woman after sectio cesarea 4. week: Care after a woman after a breast operation. 5. week: Care after a woman with endometriosis 6. week: Care after a woman with prolapse of the uterus 7. week: Care after a woman with climacteric syndrome 8. week: Care after a woman with incontinence 9. week: Care after a woman in terminal stadium 10. week: Care after a woman with bleeding state 11. week: Care after a woman with sudden gynaecological accident

Faculty:	**Faculty of Health Studies**
Course title:	***Preparing a woman for childbirth***
Course code:	KPAS/ PZP9
ECTS:	1
Level of course:	bachelor
Teacher:	Mgr. Eva Puhlová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/7
Requirements on student:	Attendance at seminars, preparation and leading of the practical lesson on the chosen topic.
Course goal:	Pre-natal preparation is a practical subject in which students implement theoretical knowledge into practical activities. The basis is to prepare a woman for motherhood and help her manage pregnancy, childbirth, the puerperium, including the care of the newborn. An important role in teaching is played by the selection of suitable topics for the education of women, the choice of techniques for practical midwife cooperation with a woman and her partner.
Content:	Exercise Topics: 1. The importance of psychoprophylaxis for woman and her motherhood. Determination of suitable topics for the preparatory course - structure and management of antenatal courses, methodology of courses, preparation of a woman for childbirth. Pregnancy, changes in pregnancy, when to hospital. Childbirth, midwifery, birth plan - midwife assistance in midwifery, midwifery management. Puerperium, taking care of a woman in this period, lactation counseling. Care for newborns, bathing, repacking, dressing, psychosomatic development of a newborn. 2. - 7. Methodological preparation of selected pre-natal preparation lessons, pactical implementation of a lesson in 1. a group of pregnant women.

Faculty:	**Faculty of Health Studies**
Course title:	***Practical bio-statistics***
Course code:	KFE / 1PBS
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	0/2
Requirements on student:	exam
Course goal:	Analysis of bio-statistical data using specialized SW.
Content:	Statistical analysis can be provided by more or less specialized SW. The free product "R" is used in this course. Students first learn how to manage the data. Then the basic descriptive characteristics are performed and the classical analytical statistical tools employed to test and to model dependencies among variables. The course is taught in English. Preliminary theoretical knowledge of statistics is not required. The course ends with the practical analysis of bio-statistical data. 2. FW R-project. Downloading, basic principles, menus, help. 3. R-project. Inserting, re-calculating and saving the data. 4. Types of variables. Categorical variable – frequencies. 5. Continuous variable – quantile and moment characteristics. 6. Computer testing with the use of p-values. 7. Categorical variables – bivariate contingency tables, chi2-test of independency. 8. Continuous variables – t-tests. 9. Analysis of variance (ANOVA) – models and tests. 10. Regression models (1) – simple regression and correlation. 11. Regression models (2) – multiple regression. 12. Time series – description, models and forecasting. 13. Cluster analysis (distance measures, k-means clustering). 14. Survival analysis (survival function, tests, Cox regression).

Faculty:	**Faculty of Health Studies**
Course title:	***Healthy lifestyle and nutrition***
Course code:	KPAS / ZZSP9
ECTS:	1
Level of course:	bachelor
Teacher:	Mgr. Eva Puhlová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	7/7
Requirements on student:	Passing the credit test.
Course goal:	The course is part of the theoretical basis for nursing care in the work of a midwife. It is an introduction to the care of the basic human need - nutrition. It provides comprehensive information on nutrition and its importance for the overall health of a person. Introduces the risks of malnutrition and overnutrition. It also specifically focuses on the nutrition of pregnant and lactating women, including the nutrition of women with pregnancy and breastfeeding difficulties. The crucial role of nutrition in primary disease prevention is described. The course introduces the risk factors of nutrition and the nutritional habits of the population, as well as the diet and nutrition in the disease. Attention is also paid to the issue of food safety.
Content:	Topics of lectures: 1. Health - definition, determinants, healthy lifestyle. Nutritional risk factors. 2. Physiology of nutrition. Energy and biological value of food. Basal metabolism. 3. Minerals. Vitamins and avitaminosis. Drinking regime. 4. Nutrition of a woman - during the preconception period and during pregnancy. Diet for pregnancy problems. 5. Breastfeeding. Newborn nutrition. 6. Specifics of children's nutrition, child nutrition in various periods of development (nutrition of toddlers, preschoolers, schoolchildren, school meals). 7. Diet system. Celiac disease. Allergy. Anorexia. Bulimia. Obesity. Seminar topics: 1. Historical development of catering. Nutritional habits of the population. Food safety. 2. The composition of the diet and the importance of individual components in human nutrition. Healthy diet. 3. Malnutrition. Malabsorption. Evaluation of nutritional status, nutritional screening (MUST, MNA, NRS, SGA, PINI). 4. Nutrition of a woman after childbirth, in the puerperium and during lactation. Recommendations for vegetarians during pregnancy and lactation. Nutrition of a woman with breastfeeding difficulties. 5. Nutrition of infants, premature babies. The composition of breast milk. Breast milk substitutes. 6. Alternative ways of eating. 15. 7. Nutrition in old age. Nutrition of patients.

Faculty:	**Faculty of Health Studies**
Course title:	***Midwifery skills I.***
Course code:	KPAS / DPA15
ECTS:	1
Level of course:	bachelor
Teacher:	Mgr. Eva Puhlová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	2/0
Requirements on student:	Active and obligatory participation in the seminars, processing and defending two case studies during the semester which are necessary together with a written test. Passing the test allows taking the exam at the end of the semester. The exam has a practical and a theoretical part.
Course goal:	The subject is both theoretical and practical and it is a core subject for the study field of birth assistance. It helps develop initial skills required by the environment of professional training of a midwife. The aim of the subject is professional training for the occupation of a midwife including complex nursing care for women in various age periods of her life.
Content:	Seminar topics: 1. Application of gynecological drugs - obstetrics, the most common indication groups. Drug application - per vaginam, per rectum, eye, nose, ear, on the skin. Oxygen therapy. Determining possible nursing problems. 2.Specifics of drug use in pregnancy and lactation, parenteral drug administration - i. M., P., Determination of possible nursing problems. 3. Infusion therapy. Documentation. Determining possible nursing problems and their solutions. 4.Transfusion therapies - Documentation. Determining possible nursing problems and their solutions. 5. Operations in PA, puncture, endoscopy, endoscopic techniques usable in gyn-por. Drainage therapy. Preparation of aids to exercise, work with a woman. Perioperative care in PA. Collection of biological material. 6.Prevention of PA in the operating theater, requirements for building, material and personnel security. The role of PA. Gynecological Instrumentarium. Sewing material. 7. Wound healing, bedsores, prevention, monitoring, procedures and solutions. Operational wound monitoring - laparotomy, laparoscopy. Documentation. Dressing and cover material. 16. 8.Problems of death and dying in gynecology and obstetrics. Caring for a woman after perinatal loss, late abortion. Caring for the dead body. Body care of a dead newborn and dead fetus.

Faculty:	**Faculty of Health Studies**
Course title:	***Biophysics***
Course code:	KPAS / BFP5
ECTS:	1
Level of course:	bachelor
Teacher:	prof. RNDr. Stanislav Novák, CSc.
Term:	summer
Language of instruction:	English
Lectures/exercises:	1/0
Requirements on student:	Active participation in the lectures, passing a written test with 80% success rate.
Course goal:	The subject introduces the basics of biophysics and its application in midwifery, medical diagnostic and treatment methods. Students will get basic information about physical differences of individual methods and their biological effects. Students will know the types of these methods and devices which are used for the examination. The other parts of the subject cover the basics of ultrasound diagnostics as the first choice examination method in gynaecology and obstetrics.
Content:	Lecture Topics: 1. week: Introduction into biophysics, construction of mass, interaction. 2. week: The phenomena on the edge of two environments, transporting phenomena. 3. week: Energy transformation in organism. 4. week: Heat and temperature, biophysical aspects of temperature regulation, the cold and heat application in therapy. 5. week: The basics of acoustics, sound and ultrasound and their diffusion, noise and audiometric, application in medicine. 6. week: The biophysics of electric manifestations and the effects of electric currents, diagnostic and therapeutic methods. 7. week: Biological membranes, active and inactive membrane potential, electric current, activity potentials. 8. week: Optics, the biophysics of sight, the diffusion of light and the basics of optical projection, medical devices using optical methods. 9. week: Electromagnetic field and its interaction with an organism, magnetotherapy. 10. week: Ionizing radiation in medicine, X-ray radiation, computer tomography, radiotherapy. 17. 11. week: Laser. Magnetic resonance.

Faculty:	**Faculty of Health Studies**
Course title:	***Medical law and professional legislation***
Course code:	KPAS / ZPOP9
ECTS:	2
Level of course:	bachelor
Teacher:	JUDr. Zdeněk Grus
Term:	summer
Language of instruction:	English
Lectures/exercises:	18/0
Requirements on student:	Seminar work, control tests.
Course goal:	Obtaining a basic overview and orientation in the legal regulations of medical law and related fields related to the organization and provision of health services with an emphasis on practical application of acquired knowledge. Knowledge of the basic legal institutes of medical law, the position of the patient in the system of providing health services, rights and obligations of patients, as well as the conditions of limiting their application, responsibility relationships, can significantly influence the patient's involvement in the decision-making process in the provision of health care, increase the legal literacy of individual actors thus contribute to improving the quality of health services provided.
Content:	Lecture Topics: 1. Introduction to health law, definition of medical law and its importance 2. Legal regulation of health services and basic legal principles 3. Hierarchy of health legislation 4. Human rights issues and constitutional order 5. Ethical aspects of health care provision and their legal significance 6. Basic rights and duties of a health care professional 7. Position, rights and obligations of the patient in the system of providing health services 8. Legal aspects of providing health services and obligations of providers 9. Basic prerequisites for the profession of health care professional 10. Appropriate professional level (providing lege artis care) 11. Patient autonomy and its limitations in providing health services 12. Protection of personality and privacy in health care 13. Medical documentation 14. Legal aspects of specific health services 15. Legal aspects of health control activities and health care activities 16. Labor law issues 17. Legal liability of health service providers and healthcare professionals 18. 18. Final summary, current legislation and case law in health care

Faculty:	**Faculty of Health Studies**
Course title:	***Principles of bio-research***
Course code:	KFE / 1PBR
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	1/0
Requirements on student:	exam
Course goal:	Basic principles of scientific research with an emphasis on healthcare science
Content:	The aim of the course is to introduce the basic principles of scientific research to students to enable them to carry out independently all the essential steps at the level required for their thesis as well as other future scientific activities, mainly in the field of healthcare sciences. The course is taught in English. The course ends with an oral exam. 1. Basic and applied research. Steps of the research project. 2. Research and search. Ethical aspects of bio-research (informed consent). 3. Clinical trials – types and examples (database ClinicalTrials.gov, EudraCT). 4. Clinical studies – types and examples (case report, case-control, cohort study). 5. Statistical survey – types and examples. 6. Statistical units, population parameters, statistical sample, representativeness. 7. Construction of questionnaire – types of variables (qualitative, quantitative, scales). 8. Interpretation of descriptive characteristics (frequencies, moments, quantiles). 9. Visualization of statistical results (tables, graphs). 10. Principles of statistical testing (research and statistical hypothesis, p-value). 11. Citations versus plagiarism. 12. Scientific journal database on internet (SCOPUS). 13. Impact factor. Database Web of Science.

GENERAL NURSE

Winter Term

Faculty:	**Faculty of Health Studies**
Course title:	***English language***
Course code:	KO/ AJV9
Level of course:	bachelor
ECTS:	1
Teacher:	Bc. Pavel Prchal
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/1
Requirements on student:	the subject requires high school level of language to enrol; final oral testing based on the set of the topics
Course goal:	Summary: Subject includes all important parts of language education: oral and written language manifestation, text understanding, pronunciation and reading practice, general vocabulary covering the following topics:
Content:	Seminar Topics: 1. week: Describing Yourself 2. week: Professional Life and Career 3. week: Job Interview 4. week: Future Plans 5. week: Making Phone Calls 6. week: Formal Letters 7. week: Social English 8. week: Free Time 9. week: University Studies

Faculty:	**Faculty of Health Studies**
Course title:	***General, developmental psychology***
Course code:	KPAS/ PSP5
Level of course:	bachelor
ECTS:	2
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	Winter
Language of instruction:	English
Lectures/exercises:	2/2
Requirements on student:	Written test
Course goal:	The subject forms the basis from which other psychological disciplines are based. It introduces students to the use of psychology in the field of nursing, to the laws of the mental life, behavior and manifestations of an individual, to the dynamics and structure of personality. Emphasis is placed primarily on the interpretation of central concepts and problems of general psychology and on methodological approaches.
Content:	Week 1: Subject and tasks of general psychology. Determination of the human psyche Week 2: Perception, imagination, fantasy Week 3: Thinking and Speaking Week 4: Intelligence, mental retardation Week 5: Memory, attention Week 6: Emotions Week 7: Motivational processes, needs and their satisfaction Week 8: Attitudes, character Week 9: Typology of personality Week 10: Methods of psychology and their use in nursing practice Week 11: Prenatal period, newborn, infant, toddler Week 12: Preschool and younger school age Week 13: Adolescence Week 14: Adulthood 15th week: Issues of the elderly

Faculty:	**Faculty of Health Studies**
Course title:	***English language***
Course code:	KO / PPV9
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Barbora Váverková
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/12
Requirements on student:	Requirements for obtaining the credit will be 80% attendance at seminars, 80% success rate of written test, verification of practical skills.
Course goal:	The subject is conceived as a theoretical and practical part of a group of subjects based on clinical practice. Students will acquire the knowledge, skills and principles for providing lay and pre-medical first aid for acute and health-threatening conditions resulting from an accident or a sudden worsening of the disease. Students are acquainted with clinical conditions that immediately threaten human life, including specific procedures that lead to its rescue. The course also includes knowledge of the legal and organizational issues of first aid, organization of disaster medicine, emergency care and crisis management.
Content:	Exercise topics: 1. Integrated rescue system, crisis management, disaster medicine, legislation. Organization of pre-hospital emergency care. 2. General principles and procedures of first aid, algorithm of urgent resuscitation in adult and child and newborn. 3. Head injury. Unconsciousness. 4. Injury of spine, joints and bones. 5. Injuries to the chest and abdomen. 6. Bleeding. Rival. 7. Effects of heat and cold on the human body. Corrosion. Electric shock. 8. First aid for sudden internal conditions. 9. Dressing technique, treatment of wounds, stopping bleeding. 10. Immobilization techniques. Positions of the injured. Transport. 11. Crass syndrome. Blast syndrome. Poisoning. 12. Drowning. Choking. Anaphylactic shock. Injuries to animals, insects.

Faculty:	**Faculty of Health Studies**
Course title:	***Physiology***
Course code:	KE / FZEK9
ECTS:	4
Level of course:	bachelor
Teacher:	MUDr. Tomáš Novotný, Ph.D., MBA
Term:	winter
Language of instruction:	English
Lectures/exercises:	18/6
Requirements on student:	Credit: active participation in classes, passing written tests - 75% success in individual tests. Exam: oral exam.
Course goal:	The subject is a part of a complex of basic theoretical subjects profiling the base of the study program and its content follows on the knowledge gained in anatomy. The aim of the course is to understand the basic physiological functions of the human organism (cell physiology and individual body organs, basic physiological manifestations of the organism, physiology of stress response in the sense of danger, fear and anxiety, emphasis is placed on the physiology of the locomotor system).
Content:	Lecture Topics: 1st consultation: Cell physiology and internal environment, striated muscle physiology and muscle movement. Physiology of blood and immune system. 2nd consultation: Physiology of respiratory system, circulatory system with focus on management principles. 3rd Consultation: Physiology of the digestive system, physiology of the urogenital system, focusing on the physiology of glomerular filtration and tubular processes. Physiology of endocrine glands. Seminar Topics: 1st consultation: Physical load physiology, blood, group antigens. Static and dynamic lung volumes, adaptation of breathing to altered conditions, monitoring of external manifestations of cardiac activity. 2nd consultation: Transformation of substances and energy - energy balance of the organism, physiology of the urogenital system with a focus on excretory pathways. Self-study: Physiology of smooth muscle tissue, physiology of cardiac muscle. Physiology of the peripheral part of the cardiovascular system - physiology of the arterial bed, venous bed. Physiology of the reproductive tract. 15. Nutrition Physiology.

Faculty:	**Faculty of Health Studies**
Course title:	***Medical psychology***
Course code:	KO / ZPV5
Level of course:	bachelor
ECTS:	3
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	1/2
Requirements on student:	Student gains credit for at least 80% of active attendance in seminars. Further students demonstrate familiarization with given issues in written form. Spoken form of the exam.
Course goal:	The subject is the part of psychology and introduces the issues of medical psychology. It deepens the knowledge which is important for professional dealing with difficult situations in care after patients with individual needs, with handicaps and dying patients, as well as it helps with keeping the mental balance of the care provider himself.
Content:	**Lecture Topics:** 1. Psychological issues of an illness/disorder. 2. Psychosomatic and somatopsychic relations, autoplastic illness image. 3. Experiencing the illness in time, relation of an ill person to the illness. 4. The category of ill people from the psychological point of view. 5. Psychological issues of hospitalization, iatropatogeny, sororigeny a egrotogeny. 6. Professional deformation, the danger of burn-out syndrome development. 7. Stress, the psychology of pain. 8. The types of disability and psychological attitude towards clients. 9. Anxiety, fear. 10. The principles of professional behaviour. **Seminar Topics:** 1. Productive and non-productive behaviour, a health care provider as a client. 2. Psychotherapy in health care work. 3. Illness as a difficult life situation. 4. Communication with an ill client. 5. Communication within a social network of a client. 6. Non-adaptive personality demonstrations, non-productive behaviour. 7. Productive behaviour and its manifestations. 8. The attitude percularities towards the clients in some departments: internal, surgical. 9. The attitude percularities towards the clients in some departments: gynaecological and neurological. 10.Sharing sad news

Faculty:	**Faculty of Health Studies**
Course title:	***Nursing care for the patients with mental disorders***
Course code:	KO / DPVK9
Level of course:	bachelor
ECTS:	3
Teacher:	Mgr. Barbora Váverková
Term:	winter
Language of instruction:	English
Lectures/exercises:	8/6
Requirements on student:	Active participation in lessons - 80%, successful completion of a written test with oral defense.
Course goal:	The course is designed as theoretical. It acquaints students with general psychiatry, possibilities of diagnostics and therapy. It introduces the legal aspects related to mental disorders and points out the importance of nursing care as part of the treatment of mental disorders.
Content:	Lecture topics: 1st consultation: Structure of psychiatric care in the Czech Republic; legal issues. Psychiatric examination - examination methods, symptoms of mental disorders. Treatment in psychiatry - pharmacotherapy, psychotherapy, other methods (ECT). 2nd consultation: Mood disorders - depression, bipolar affective disorder. Personality disorders - overview. Anorexia nervosa and bulimia - diagnostic criteria and therapy. Seminar topics: 3rd consultation: Neurotic disorders - classification, case reports. Psychotic disorders - classification, diagnostic criteria Addiction to addictive substances. Mental health care in individual age groups of population. Self-study: Intensive nursing care - practical examples. Mental disorders in children and adolescents - specifics, case reports, diagnostic criteria. Organic mental disorders - case reports. Dependence on addictive substances - practical examples.

Faculty:	**Faculty of Health Studies**
Course title:	***English language***
Course code:	KO / VDVK9
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Barbora Váverková
Term:	summer
Language of instruction:	English
Lectures/exercises:	5/0
Requirements on student:	passing the credit test
Course goal:	The course is designed as a theoretical unit. It is an introduction to the care of the basic human need - nutrition. It provides comprehensive information on nutrition and its importance for the overall health of a person. It points to specifically focused nutrition in individual periods of life - from newborns to old age. Subsequently, they will gain basic knowledge about the prevention of chronic diseases associated with unhealthy lifestyles.
Content:	Seminar topics: 1. Health, determinants of health, lifestyle - definition, risk factors, prevention, the importance of healthy nutrition for active life, food intake management, energy requirements, energy and biological value of food. 2. The composition of the diet and the importance of individual components in human nutrition. 3. Nutrition in individual periods of life - pregnant woman, woman in lactation, newborns. 4. Nutrition in individual periods of life - old age, sick patients (diet system in hospitals), athletes. 5. Nutritional diseases. Self-study: the role of sugars, fats, proteins, vitamins, minerals and trace elements physical activity and nutrition

Faculty:	**Faculty of Health Studies**
Course title:	***Medical law and professional legislation***
Course code:	KPAS / ZPOP9
ECTS:	2
Level of course:	bachelor
Teacher:	JUDr. Zdeněk Grus
Term:	summer
Language of instruction:	English
Lectures/exercises:	18/0
Requirements on student:	Seminar work, control tests.
Course goal:	Obtaining a basic overview and orientation in the legal regulations of medical law and related fields related to the organization and provision of health services with an emphasis on practical application of acquired knowledge. Knowledge of the basic legal institutes of medical law, the position of the patient in the system of providing health services, rights and obligations of patients, as well as the conditions of limiting their application, responsibility relationships, can significantly influence the patient's involvement in the decision-making process in the provision of health care, increase the legal literacy of individual actors thus contribute to improving the quality of health services provided.
Content:	Lecture Topics: 1. Introduction to health law, definition of medical law and its importance 2. Legal regulation of health services and basic legal principles 3. Hierarchy of health legislation 4. Human rights issues and constitutional order 5. Ethical aspects of health care provision and their legal significance 6. Basic rights and duties of a health care professional 7. Position, rights and obligations of the patient in the system of providing health services 8. Legal aspects of providing health services and obligations of providers 9. Basic prerequisites for the profession of health care professional 10. Appropriate professional level (providing lege artis care) 11. Patient autonomy and its limitations in providing health services 12. Protection of personality and privacy in health care 13. Medical documentation 14. Legal aspects of specific health services 15. Legal aspects of health control activities and health care activities 16. Labor law issues 17. Legal liability of health service providers and healthcare professionals 18. Final summary, current legislation and case law in health care

Faculty:	**Faculty of Health Studies**
Course title:	***English language***
Course code:	KO / MIIV5
Level of course:	bachelor
ECTS:	3
Teacher:	Mgr. Barbora Váverková
Term:	summer
Language of instruction:	English
Lectures/exercises:	2/1
Requirements on student:	Obligatory lecture attendance, a written test (75% success rate), a visit to a microbiologic and an immunologic laboratory
Course goal:	The subject is a set of topical units. Students will get basic knowledge in the fields of microbiology and immunology, which is an important background for studying epidemiology, hygiene and health education, all parts of public health care, and also health care and prevention of nosocomial infection. The study is focused on the basics of medical microbiology: general and special; bacteriology, virology, and parasitology, mycology and basics immunology: immune system, immunity, microbiologic and immunologic laboratory methods, clinical immunology.
Content:	Lecture Topics: 1. week: Microbiology: the definition of the field, classification of micro-organisms, microorganisms and human organism 2. week: The classification of micro-organisms, the classification of bacteria, the structure of a bacterial cell, the physiology of a bacterial cell, the crowth and procreation of bacteria, pathogenesis and virulence of bacteria 3. week: Bacterial toxins, antimicrobial substances, resistance 4. week: Characteristics and classification of viruses, interaction of viruses and cells, mechanisms of viral infection and their treatment 5. week: Mycology, parasitology, special bacteriology: coccuses and coccubacilluses 6. week: Aerobic and anaerobic sticks, enterobacteria, spirochets, chlamydia 7. week: Special virology 8. week: Immunology: definition of the field: immune system, immunity 9. week: Immunization. Clinical immunology Seminar Topics: 1. week: The sampling of biologic material 2. week: Laboratory microbiologic diagnostics, sensitivity to antibiotics 3. week: Serological laboratory diagnostics 4. week: A visit to a microbiological laboratory 5. week: A visit to a immunological laboratory 6. week: A visit to a microbiological laboratory 7. week: A visit to a immunological laboratory 8. week: Creating and presenting a seminar project on selected topics 9. week: Creating and presenting a seminar project on selected topics

Faculty:	**Faculty of Health Studies**
Course title:	***German language***
Course code:	KO/ NJV9
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Vratislava Postlová, Ph.D.
Term:	summer
Language of instruction:	German
Lectures/exercises:	0/1
Requirements on student:	active class participation, passing a written test with 80% success rate
Course goal:	Subject includes studying foreign language for intermediate students with the focus on professional language in health care. The aim is handling with professional activities, reading and understanding a professional text in a foreign language, knowledge of domestic and foreign professional media. Students will be able to communicate in a foreign professional environment.
Content:	Seminar Topics: 1. week: Geschichte 2. week: Berufsbild 3. week: Kompetenzen 4. week: Ausbildung 5. week: Inhalt 6. week: Schwangerschaftsanzeichen 7. week: Wo entbinden? 8. week: Hausgeburt 9. week: Hausgeburt

Faculty:	**Faculty of Health Studies**
Course title:	***Psychology***
Course code:	KO/ PSYV9
Level of course:	bachelor
ECTS:	2
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	2/0
Requirements on student:	written test
Course goal:	The subject consists of the knowledge covering psychological disciplines: general psychology, personality psychology, development psychology and broaden student's understanding of issues of health psychology and social psychology. The special focus is put on mental health of women and children, including prevention of negative states in the society.
Content:	**Lecture Topics:** 1. week: Individual socialization. 2. week: Socialization mechanisms. 3. week: Socialization agents. 4. week: Social pathological phenomena in the society. 5. week: Prevention of social pathological phenomena. 6. week: Social group, definition, classification. 7. week: Group structure and dynamics. 8. week: Social role and position, professional deformation and prevention. 9. week: Family and its development. 10. week: Family pathology. 11. week: Addiction issues

Faculty:	**Faculty of Health Studies**
Course title:	***Public Health Care and Health Education***
Course code:	KO/ VZV9
Level of course:	bachelor
ECTS:	5
Teacher:	PhDr. Olga Jarabicová, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	2/2
Requirements on student:	Obligatory attendance of the lectures, a test with a minimum of 75% passing level, submitting and presentation of a seminar project: the intervention program.
Course goal:	The subject is a topical unit providing the students with the basic knowledge from the fields of epidemiology, hygiene, health education, which is an important part of public health care. It is the knowledge which is necessary for the protection and support of public health; it helps the understanding of the connections between clinical and preventive medicine and midwifery. It also covers the prevention of professional injuries of the medical staff and nosocomial infections.
Content:	**Lecture Topics:** 1. week: Health, aspects of health, determinants of health, protection and support of health, prevention of diseases 2. week: International documents about protection and support of health, health 21 3. week: Public health care: the focus, content, segments, realization in training 4. week: Epidemiology of infectious diseases: general issues; epidemiological measures 5. week: Groups of infections based on transmission and the examples of infections 6. week: Environment and health; preventive health protecting measures 7. week: Work environment and health; health protection 8. week: Epidemiology of chronical diseases and their prevention 9. week: Hygiene in medical facilities; nosocomial infections and their prevention 10. week: Health education: goals, methods and forms 11. week: The activities of a a nurse in health education sector **Seminar Topics:** 1. week: Questionnaire 2. week: Intervention program 3. week: Team work 4. week: Information: a medical-education flyer/leaflet on the topic 5. week: Personal hygiene and hand washing of a medical staff 6. week: Laundry operations in a medical facility 7. week: Dealing with garbage/trash in a medical facility 8. week: Health risks evaluation, categorization of work and health protection of a medical staff 9. week: Disinfection and sterilization 10. week: Presentation of seminar projects 11. week: Presentation of seminar projects

Faculty:	**Faculty of Health Studies**
Course title:	***Practical bio-statistics***
Course code:	KFE / 1PBS
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	0/2
Requirements on student:	exam
Course goal:	Analysis of bio-statistical data using specialized SW.
Content:	Statistical analysis can be provided by more or less specialized SW. The free product "R" is used in this course. Students first learn how to manage the data. Then the basic descriptive characteristics are performed and the classical analytical statistical tools employed to test and to model dependencies among variables. The course is taught in English. Preliminary theoretical knowledge of statistics is not required. The course ends with the practical analysis of bio-statistical data. 1. FW R-project. Downloading, basic principles, menus, help. 2. R-project. Inserting, re-calculating and saving the data. 3. Types of variables. Categorical variable – frequencies. 4. Continuous variable – quantile and moment characteristics. 5. Computer testing with the use of p-values. 6. Categorical variables – bivariate contingency tables, chi2-test of independency. 7. Continuous variables – t-tests. 8. Analysis of variance (ANOVA) – models and tests. 9. Regression models (1) – simple regression and correlation. 10. Regression models (2) – multiple regression. 11. Time series – description, models and forecasting. 12. Cluster analysis (distance measures, k-means clustering). 13. Survival analysis (survival function, tests, Cox regression).

Faculty:	**Faculty of Health Studies**
Course title:	***Principles of bio-research***
Course code:	KFE / 1PBR
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	1/0
Requirements on student:	exam
Course goal:	Basic principles of scientific research with an emphasis on healthcare science
Content:	The aim of the course is to introduce the basic principles of scientific research to students to enable them to carry out independently all the essential steps at the level required for their thesis as well as other future scientific activities, mainly in the field of healthcare sciences. The course is taught in English. The course ends with an oral exam. 1. Basic and applied research. Steps of the research project. 2. Research and search. Ethical aspects of bio-research (informed consent). 3. Clinical trials – types and examples (database ClinicalTrials.gov, EudraCT). 4. Clinical studies – types and examples (case report, case-control, cohort study). 5. Statistical survey – types and examples. 6. Statistical units, population parameters, statistical sample, representativeness. 7. Construction of questionnaire – types of variables (qualitative, quantitative, scales). 8. Interpretation of descriptive characteristics (frequencies, moments, quantiles). 9. Visualization of statistical results (tables, graphs). 10. Principles of statistical testing (research and statistical hypothesis, p-value). 11. Citations versus plagiarism. 12. Scientific journal database on internet (SCOPUS). 13. Impact factor. Database Web of Science.

Faculty:	**Faculty of Health Studies**
Course title:	***Information Systems in Health Care***
Course code:	KO/ ISV9
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Nela Kubová, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	0/1
Requirements on student:	Minimum 80% class participation. The credit requirement is also practical testing (the knowledge and skills of computer work)
Course goal:	The subject teaches the user's and professional approach towards informatics, information technology and the possibilities of its application in health care. It provides basis for using software, text and data processing.
Content:	**Seminar Topics:** 1. week: Basic IT knowledge: information and its units, HW and SW 2. week: Working rules with the internet, browsers, DNS, viruses and anti-viruses, e-mail. 3. week: E-learning: function and types of e-learning system, approach towards e-learning at the faculty (Moodle) and other faculties with similar focus (MEFANET). 4. week: MS-Office advanced: format copying, Ctrl+H for substituting, PowerPoint (transitions betweens slides, animation application). 5. week: Word: dividing the document into sections and types of page numbering in sections, titles and generating summary, citations and generation of bibliography. 6. week: Excel: Automatic filling of sequences, anchoring of dividers , copying using the lock symbol, sorting the data using several criteria. 7. week: Excel: function =sum, selected text and logical functions, a bar chart, a pie chart, connection chart, point chart and their editing: change of the scale or of naming the axes. 8. week: General principles and trends in E-health, EHR (EPR): electronic health (patient) record, standards (HL7). 9. week: IS in health care and in hospitals (functions, examples), the principles and examples of using telemedicine.

Summer Term

Faculty:	**Faculty of Health Studies**
Course title:	***English language - professional terminology***
Course code:	KO/ AJV9
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Hana Vohradská
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/1
Requirements on student:	Successful passing of the course FOREIGN LANGUAGE (English)
Course goal:	The course includes all important parts of language education: oral and written manifestation, text understanding, reading and pronunciation training, professional vocabulary training covering the following topics:
Content:	Seminar Topics: 1. week: Nursing as a Profession 2. week: General Nursing 3. week: Human Body 4. week: Common Diseases in General Practice 5. week: Health Examination Procedure 6. week: Medical Treatment 7. week: Nurse-Patient Communication

Faculty:	**Faculty of Health Studies**
Course title:	***German language - professional terminology***
Course code:	KO/ NJV9
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Vratislava Postlová, Ph.D.
Term:	summer
Language of instruction:	German
Lectures/exercises:	0/1
Requirements on student:	Active class participation, passing a written test with 80% success rate.
Course goal:	The subject includes studying of a foreign language for intermediate students with the focus on professional language in health care. It aims at reading and understanding foreign professional texts to stimulate informing about local and international professional publications. The course will help a student to communicate in foreign language environment.
Content:	Seminar Topics: 1. week: Wiederholung des letzten Semesters 2. week: Vokabular II. 3. week: Unterschiede Deutschland und Tschechien 4. week: Praktische Sprachverwendung I. 5. week: Praktische Sprachverwendung II. 6. week: Vokabular III. 7. week: Praktische Sprachverwendung II

Faculty:	**Faculty of Health Studies**
Course title:	***Practical bio-statistics***
Course code:	KFE / 1PBS
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	0/2
Requirements on student:	exam
Course goal:	Analysis of bio-statistical data using specialized SW.
Content:	Statistical analysis can be provided by more or less specialized SW. The free product "R" is used in this course. Students first learn how to manage the data. Then the basic descriptive characteristics are performed and the classical analytical statistical tools employed to test and to model dependencies among variables. The course is taught in English. Preliminary theoretical knowledge of statistics is not required. The course ends with the practical analysis of bio-statistical data. 1. FW R-project. Downloading, basic principles, menus, help. 2. R-project. Inserting, re-calculating and saving the data. 3. Types of variables. Categorical variable – frequencies. 4. Continuous variable – quantile and moment characteristics. 5. Computer testing with the use of p-values. 6. Categorical variables – bivariate contingency tables, chi2-test of independency. 7. Continuous variables – t-tests. 8. Analysis of variance (ANOVA) – models and tests. 9. Regression models (1) – simple regression and correlation. 10. Regression models (2) – multiple regression. 11. Time series – description, models and forecasting. 12. Cluster analysis (distance measures, k-means clustering). 13. Survival analysis (survival function, tests, Cox regression).

Faculty:	**Faculty of Health Studies**
Course title:	***Physiology***
Course code:	KO / FYD2
ECTS:	4
Level of course:	bachelor
Teacher:	MUDr. Tomáš Novotný, Ph.D., MBA
Term:	winter
Language of instruction:	English
Lectures/exercises:	18/6
Requirements on student:	Credit: active participation in classes, passing written tests - 75% success in individual tests. Exam: oral exam.
Course goal:	The subject is a part of a complex of basic theoretical subjects profiling the base of the study program and its content follows on the knowledge gained in anatomy. The aim of the course is to understand the basic physiological functions of the human organism (cell physiology and individual body organs, basic physiological manifestations of the organism, physiology of stress response in the sense of danger, fear and anxiety, emphasis is placed on the physiology of the locomotor system).
Content:	Lecture Topics: 1st consultation: Cell physiology and internal environment, striated muscle physiology and muscle movement. Physiology of blood and immune system. 2nd consultation: Physiology of respiratory system, circulatory system with focus on management principles. 3rd Consultation: Physiology of the digestive system, physiology of the urogenital system, focusing on the physiology of glomerular filtration and tubular processes. Physiology of endocrine glands. Seminar Topics: 1st consultation: Physical load physiology, blood, group antigens. Static and dynamic lung volumes, adaptation of breathing to altered conditions, monitoring of external manifestations of cardiac activity. 2nd consultation: Transformation of substances and energy - energy balance of the organism, physiology of the urogenital system with a focus on excretory pathways. Self-study: Physiology of smooth muscle tissue, physiology of cardiac muscle. Physiology of the peripheral part of the cardiovascular system - physiology of the arterial bed, venous bed. Physiology of the reproductive tract. 16. Nutrition Physiology.

Faculty:	**Faculty of Health Studies**
Course title:	***Principles of bio-research***
Course code:	KFE / 1PBR
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	1/0
Requirements on student:	exam
Course goal:	Basic principles of scientific research with an emphasis on healthcare science
Content:	The aim of the course is to introduce the basic principles of scientific research to students to enable them to carry out independently all the essential steps at the level required for their thesis as well as other future scientific activities, mainly in the field of healthcare sciences. The course is taught in English. The course ends with an oral exam. 1. Basic and applied research. Steps of the research project. 2. Research and search. Ethical aspects of bio-research (informed consent). 3. Clinical trials – types and examples (database ClinicalTrials.gov, EudraCT). 4. Clinical studies – types and examples (case report, case-control, cohort study). 5. Statistical survey – types and examples. 6. Statistical units, population parameters, statistical sample, representativeness. 7. Construction of questionnaire – types of variables (qualitative, quantitative, scales). 8. Interpretation of descriptive characteristics (frequencies, moments, quantiles). 9. Visualization of statistical results (tables, graphs). 10. Principles of statistical testing (research and statistical hypothesis, p-value). 11. Citations versus plagiarism. 12. Scientific journal database on internet (SCOPUS). 13. Impact factor. Database Web of Science.

Faculty:	**Faculty of Health Studies**
Course title:	***Medical Psychology***
Course code:	KO / ZPV9
ECTS:	2
Level of course:	bachelor
Teacher:	Mgr. Miroslava Zemanová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	38/0
Requirements on student:	Student will become credit for min. 80% active attendance in seminars, he/she will demonstrate orientation in this area in the written form.
Course goal:	The subject is designed as theoretical - practical. It deals with the psychology of patients / clients of healthcare facilities and their families. It deals with the preparation of students for mastering the LLL and the specifics of the attitude of medical staff. Knowledge of medical psychology will contribute to better understanding of patients / clients, healthy and sick, and to understanding their needs and problems.
Content:	Lecture topics: 1. Psychological problems of illness. 2. Psychosomatic and somatopsychic relations, autoplastic picture of the disease. 3. Experiencing illness in time, ratio of patient to illness. 4. Category of patients from psychological point of view. 5. Psychological problems of hospitalization, iatropatogenia, sororigenia and egrotogenia. 6. Professional deformation, danger of burnout. 7. Iatropatogenie. 8. Psychology of pain, anxiety, fear and inferiority. 9. Types of disability and psychological approach to clients. 10. Dying and death in terms of psychology. 11. Productive and unproductive behavior, medic as a client. 12. Principles of professional behavior. Seminar topics: 1. Psychotherapy in medical work. 2. Illness as a difficult life situation. 3. Communication with sick client, senior. 4. Communication within the client's social network. 5. Non-productive behavior, productive behavior and its manifestations. 6. Special features of approach to clients in individual departments.

Faculty:	**Faculty of Health Studies**
Course title:	***Research in Health Care***
Course code:	KO / VOV9
ECTS:	1
Level of course:	bachelor
Teacher:	Mgr. Miroslava Zemanová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/18
Requirements on student:	Elaboration of the seminar work.
Course goal:	The subject is designed as a theoretical-practical one, which assumes the application of knowledge acquired in other nursing and humanitarian subjects as well as a certain level of creativity. It will teach students the basics of critical scientific thinking, understanding the need and importance of a scientific approach in evidence-based nursing practice (Evidence Based Practice and Evidence Based Nursing, hereinafter referred to as EBP and EBN). It will teach them the basic steps of the research process. The aim of the course is primarily to provide students with practical guidance on how to proceed in preparing a bachelor's thesis.
Content:	Seminar Topics: (3 hours / week) 1. Basic concepts (research / research, basic / applied research, qualitative / quantitative, experiment / investigation). 2. Types of clinical trials and studies, ethical aspects - informed consent. 1. Publishing ethics - copyright law, citation standards. 2. Specifics of nursing research: research strategy, research priorities for the 21st century. 3. Qualitative approaches in nursing research. 4. Observation, grounded theories, content analysis. 5. Case study. Publication and presentation of the results.

Faculty:	**Faculty of Health Studies**
Course title:	***Microbiology and immunology***
Course code:	KO / MIIV9
ECTS:	2
Level of course:	bachelor
Teacher:	Mgr. Miroslava Zemanová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	12/6
Requirements on student:	Credit: 80% participation in seminars, elaboration and presentation of seminar work, written test (75% success rate), Exam: oral exam
Course goal:	The subject forms a thematic unit. By completing it, students gain basic knowledge in the fields of microbiology and immunology, which form an important basis for the study of epidemiology, hygiene and health education, ie components of public health, but also nursing in clinical fields and prevention of infections associated with health care. Teaching is focused on the basics of medical microbiology - general and special; bacteriology, virology, parasitology, mycology and basics of immunology: immune system, immunity, microbiological and immunological laboratory methods, clinical immunology, immunization.
Content:	Topics of lectures (2 hours / week) and seminars (1 hour / week) 1. Microbiology - definition of the field, classification of microorganisms, relations between microorganisms and the human organism, division of microorganisms. Normal microflora of the human body. Seminar: Classification of bacteria. Morphological features of bacteria. Structure, shapes and arrangement of bacteria. 2. Bacteriology - physiology and genetics of bacteria, pathogenicity and virulence of bacteria, bacterial toxins; bacterial infections. Seminar: Collection and transport of biological material for laboratory examination. Bacterial culture test (soil, subtraction); microscopic evaluation; Serological diagnostics. 3. Special bacteriology: characteristics of medically important bacteria and their effects on the human body; antimicrobials, antibiotic resistance. Seminar: Assessment of antibiotic susceptibility. Illustrative examples of individual groups of bacteria and their representatives in connection with lectures. 4. Virology - properties and classification of viruses, interactions of viruses and cells, mechanisms of viral infections, characteristics of medically important viruses and their effects on the human body. Seminar: Construction of viruses; illustrative examples of individual families and their representatives. Virological diagnostics; cytopathic effect. 5. Immunology - definition of the field, immune system and its function, humoral and cellular immunity, non-specific, specific; clinical immunology; immunization. Reporting of infectious diseases and healthcare associated infections. Vaccination calendar.5. Non-productive behavior, productive behavior and its manifestations. 6. Special features of approach to clients in individual departments.

Faculty:	**Faculty of Health Studies**
Course title:	***Nursing care in Neurology***
Course code:	KPAS / PNV9
ECTS:	2
Level of course:	bachelor
Teacher:	prof. MUDr. Martin Sameš, CSc.
Term:	summer
Language of instruction:	English
Lectures/exercises:	12/6
Requirements on student:	Obtaining the credit: min. 80% attendance in lessons, passing credit test with min. 75% success, elaboration of educational material for a given topic. Oral exam.
Course goal:	This subject is a theoretical-practical unit. It is part of a complex of subjects from clinical nursing. It introduces clinical conditions in terms of nursing care and the needs of patients altered in connection with diseases that affect the nervous system and which significantly affect the quality of life of a person.
Content:	Lecture Topics: (2 hours / week) 1. Ischemic stroke. 2. Bleeding strokes. 3. Vertebrogenic disease - prolapse of intervertebral disc, degenerative stenosis. Brain tumors in adults and children, spine and spinal cord tumors. 4. Craniocerebral trauma, spinal cord injury. 5. Infectious diseases of the nervous system. 6. Injury of peripheral nerves, strait syndromes. Hydrocephalus in children and adults, normotensive hydrocephalus. Exercise topics: 1. General assessment of a patient in neurology by a nurse (physical examination, consciousness assessment). Examination methods in neurology (preparation of patient for examination, monitoring after examination). 2. Nursing care of a patient with stroke in acute, subacute and rehabilitation phase. Nursing care of a patient with vertebrogenic disease. Nursing care of a patient with meningitis, encephalitis. 3. Nursing care of patients with brain, spine, spinal cord tumor. 4. Nursing care of a patient with multiple sclerosis. Nursing care of a patient with normotensive hydrocephalus. 5. Nursing care of a patient with epilepsy. Nursing care of a patient with migraine. 19. 6. Nursing care of patients with degenerative diseases of the nervous system (Alzheimer's disease, Amyotrophic lateral sclerosis). Nursing care of a patient with degenerative diseases of the nervous system (Parkinson's disease).

Faculty:	**Faculty of Health Studies**
Course title:	***Nursing care for the patients with mental disorders***
Course code:	KO / PDPV9
ECTS:	2
Level of course:	bachelor
Teacher:	Mgr. Barbora Váverková
Term:	summer
Language of instruction:	English
Lectures/exercises:	12/6
Requirements on student:	Active participation in lessons - 80%, successful passing of the written test with oral advocacy.
Course goal:	The subject is designed as theoretical. It acquaints students with general psychiatry, possibilities of diagnostics and therapy. It introduces the legal aspects related to mental disorders and points out the importance of nursing care as part of the treatment of mental disorders.
Content:	Lecture Topics: (2 hours / week) 1. Structure of psychiatric care in the Czech Republic; legal issues. 2. Psychiatric examination - examination methods, symptoms of mental disorders. 3. Mood disorders - depression, bipolar affective disorder. 4. Personality disorders - overview. 5. Anorexia nervosa and bulimia - diagnostic criteria and therapy. 6. Psychotic disorders - classification, diagnostic criteria Dependence on addictive substances. Mental health care. in individual age groups of the population. Seminar topics: 1. Intensive nursing care - practical examples. 2. Treatment in psychiatry - pharmacotherapy, psychotherapy, other methods (ECT). 3. Mental disorders in children and adolescents - specifics, case reports, diagnostic criteria. 4. Neurotic disorders - classification, case reports. 5. Organic mental disorders - case reports. 20. 6. Addiction to addictive substances - practical examples.

Faculty:	**Faculty of Health Studies**
Course title:	***Biophysics***
Course code:	KPAS / BFP5
ECTS:	1
Level of course:	bachelor
Teacher:	prof. RNDr. Stanislav Novák, CSc.
Term:	summer
Language of instruction:	English
Lectures/exercises:	1/0
Requirements on student:	Active participation in the lectures, passing a written test with 80% success rate.
Course goal:	The subject introduces the basics of biophysics and its application in midwifery, medical diagnostic and treatment methods. Students will get basic information about physical differences of individual methods and their biological effects. Students will know the types of these methods and devices which are used for the examination. The other parts of the subject cover the basics of ultrasound diagnostics as the first choice examination method in gynaecology and obstetrics.
Content:	Lecture Topics: 1. week: Introduction into biophysics, construction of mass, interaction. 2. week: The phenomena on the edge of two environments, transporting phenomena. 3. week: Energy transformation in organism. 4. week: Heat and temperature, biophysical aspects of temperature regulation, the cold and heat application in therapy. 5. week: The basics of acoustics, sound and ultrasound and their diffusion, noise and audiometric, application in medicine. 6. week: The biophysics of electric manifestations and the effects of electric currents, diagnostic and therapeutic methods. 7. week: Biological membranes, active and inactive membrane potential, electric current, activity potentials. 8. week: Optics, the biophysics of sight, the diffusion of light and the basics of optical projection, medical devices using optical methods. 9. week: Electromagnetic field and its interaction with an organism, magnetotherapy. 10. week: Ionizing radiation in medicine, X-ray radiation, computer tomography, radiotherapy. 21. 11. week: Laser. Magnetic resonance.

OCCUPATIONAL THERAPY

Winter Term

Faculty:	**Faculty of Health Studies**
Course title:	***English language I***
Course code:	KE/AJE9
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Pave
Term:	winter
Language of instruction:	English
Lectures/exercises:	0/1
Requirements on student:	Attendance 80%, Online quizzes 80%, Oral conversation
Course goal:	The subject includes teaching English for intermediate students focused on professional language regarding health care area within Occupational Therapy. The aim is reading and understanding foreign professional texts, enhance listening skills and communication with patients and colleagues.
Content:	**Seminar Topics:** 1. Introduction to Occupational Therapy 2. The Human Body, Positional and Directional Terms 3. The Human Body Systems 4. The Nervous System 5. The Muscular System 6. At the Doctor's Office 7. Examination of the Patient 8. Therapeutic Techniques in OT 9. Caring for the Elderly 10. Caring for the Children 11. The First Aid and Emergencies 12. At the Hospital 13. Communication with the Patients

Faculty:	**Faculty of Health Studies**
Course title:	***German language I***
Course code:	KE/NJE9
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Vratislava Postlová
Term:	winter
Language of instruction:	German
Lectures/exercises:	0/1
Requirements on student:	Active 80% seminar attendance, passing a written test with 80% passing level
Course goal:	A foreign language for intermediate level students focused on professional language.
Content:	**Seminar Topics:** 1. Human body: complete description. 2. Bones and joints I. 3. Bones and joints II. 4. Bone fractures and disorders. 5. Muscles. 6. Circulatory system. 7. Nerve system. 8. General health care service I. 9. General health care service II. 10. Revision.
Faculty:	Faculty of Health Studies
Course title:	**Therapeutic Techniques and Activities I**
Course code:	**KE/TT1E9**
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Petra Pecharová
Term:	winter
Language of instruction:	English
Lectures/exercises:	0/2
Requirements on student:	80% seminar attendance, continuous demonstration of practical skills
Course goal:	The subject provides students with basic knowledge of different types of human activities including materials and tools. It provides an insight into different spheres of work activities and their realization when dealing with different types of illnesses. The subject is structured as practical. The analysis of individual activities will help the students to select and apply appropriate techniques for treatment rehabilitation regarding the goals of occupational therapy.
Content:	**Seminar Topics:** 1. Introduction to the subject (definition of therapeutic techniques in the field of occupational therapy methods and procedures, ensuring occupational health and safety for selected therapeutic techniques) 2. Art technique (analysis of therapeutic activity) 3. Art technique (analysis of therapeutic activity) 4. Art technique (analysis of therapeutic activity) 5. Art technique (analysis of therapeutic activity) 6. Art technique (analysis of therapeutic activity) 7. Art technique (analysis of therapeutic activity) 8. Art technique (analysis of therapeutic activity) 9. Art technique (analysis of therapeutic activity) 10. Group work (production of occupational therapy poster)

Faculty:	**Faculty of Health Studies**
Course title:	***Introduction to Occupational Therapy***
Course code:	KE/UERE9
Level of course:	bachelor
ECTS:	4
Teacher:	doc. MUDr. Jiří Votava, CSc. Mgr. Petra Pecharová, PhDr. Michal Vostrý, Mgr. Radka Beranová, Dis..
Term:	winter
Language of instruction:	English
Lectures/exercises:	2/2
Requirements on student:	Active 80% participation in seminars, participation in a trip to a selected institution, creation and presentation of the seminar assignment: "The analysis of the internet address dealing with the issues of the disabled", "The analysis of the piece of art considering the issue of health disability", "The analysis of life roles of a particular person".
Course goal:	The goal of this subject is to familiarize the students with occupational therapy specialization, its history and knowledge, skills as well as skills abilities an occupational therapist should develop. Furthermore, it shows the student the areas and institutions where an occupational therapist can be employed.
Content:	**Lecture Topics:** 1. The history of occupational therapy in the Czech Republic and around the world. 2. Current status situation of occupational therapy, the system of education. 3. Medical and comprehensive rehabilitation. 4. Status and organization of people with health disability. 5. Understanding of occupational therapy, expertise areas for an occupational therapist. 6. Team work, activities training. 7. Examination in occupational therapy. Aid /Assisting technique. 8. Pre-occupational rehabilitation. 9. Client's living environment. 10. Occupational therapy and its application for common diagnoses and disabilities. 11. The types of institutions where occupational therapists work. **Seminar Topics:** 1. 1. Compensation aids. 2. Work with case reports, taking anamnesis. 3. Simulation of disability. 4. Evaluation of barriers in the residence and public building. 5. Examination by an occupational therapist. 6. Positioning. 7. Work with occupational therapy documentation. 8. ADL - testing and practice. 9. List of medical procedures in occupational therapy and physiotherapy. 10. Repetition

Faculty:	**Faculty of Health Studies**
Course title:	***Art Therapy I***
Course code:	KE/ART19
Level of course:	bachelor
ECTS:	3
Teacher:	PhDr. Hana Kynštová, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	0/1
Requirements on student:	80% seminar attendance, result presentation regarding practical classes
Course goal:	The subject provides basic information about art therapy application among children and adults with mental, movement and sense disability. It also deals with art therapy in psychiatry and helps students to understand some techniques applied in occupational therapy intervention.
Content:	Seminar topics 1.Introduction to the subject of art therapy, basic terms and definitions. 2. The Goals of art therapy. The meaning of colours. The structure of therapy. 3. Art therapy among children with mental, sense and physical disability. 4. Art therapy among adult individuals with mental, sense and physical disability. 5. Individual art therapy for blind people: haptic communication. 6. Individual art therapy of deaf people: hand gesticulation. 7. Art therapy for psychiatric diagnosis. 8. Art therapy application while dealing with an individual. 9. Group art therapy application. 10.Group discussion regarding results presentation gained during practical classes

Faculty:	**Faculty of Health Studies**
Course title:	***First Aid***
Course code:	KE / PPE9
Level of course:	bachelor
ECTS:	1
Teacher:	PhDr. Hana Kynštová, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	0/10
Requirements on student:	Credit: 80% attendance at seminars and 80% success of written test. Credit will take the form of a written test.
Course goal:	The course is conceived as a theoretical and practical part of a group of subjects based on clinical practice. Students will acquire knowledge, skills and principles for providing laical and pre-medical first aid in acute and health-threatening conditions resulting from an accident or sudden worsening of the disease. Students are acquainted with clinical conditions that immediately threaten human life, including specific procedures that lead to its rescue. The course also includes knowledge of the legal and organizational issues of providing first aid, the organization of disaster medicine, emergency care and crisis management.
Content:	Exercise Topics: 1. Integrated rescue system, crisis management, disaster medicine, legislation. 2. Organization of pre-hospital emergency care. General principles and procedures of first aid provision, urgent resuscitation algorithm for adults and children and newborns. 3. Head injury. Unconsciousness. Choking. Anaphylactic shock. 4. Injury of spine, joints and bones. Injury to an animal 5. Injury of chest and abdomen. Bleeding. Rival. 6. Effects of heat and cold on human organism. Corrosion. Electric shock injury. 7. First aid in sudden internal states. 8. Dressing technique, wound care, bleeding. 9. Immobilization techniques. The position of the wounded. Transport. 10. Crass syndrome. Blast syndrome. Poisoning.

Faculty:	**Faculty of Health Studies**
Course title:	***Winter Skiing Course***
Course code:	KE/ZTVE9
Level of course:	bachelor
ECTS:	1
Teacher:	PhDr. Hana Kynštová
Term:	winter
Language of instruction:	English
Lectures/exercises:	5 days
Requirements on student:	Active participation in ski training course for the impaired.
Course goal:	The idea of the course is to familiarize the students both theoretically and practically, within the skiing course, with the basics of downhill and cross-country skiing. The emphasis will be put on teaching of Czech school of skiing: downhill and slalom technique for alpine skiing and classic and skate skiing style when teaching cross-country skiing. The goal of the training is to have the ability to apply individual skiing skills when teaching skiing to disabled people.
Content:	Content Focus: The didactics and assistance of skiing on the monoski. The didactics of skiing for people with visual impairment. The didactics of skiing for people with hearing impairment. Supporting activities.

Faculty:	**Faculty of Health Studies**
Course title:	***Art Therapy I***
Course code:	KE/ART19
Level of course:	bachelor
ECTS:	3
Teacher:	PhDr. Hana Kynštová, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	0/1
Requirements on student:	80% seminar attendance, result presentation regarding practical classes
Course goal:	The subject provides basic information about art therapy application among children and adults with mental, movement and sense disability. It also deals with art therapy in psychiatry and helps students to understand some techniques applied in occupational therapy intervention.
Content:	Seminar topics 1.Introduction to the subject of art therapy, basic terms and definitions. 2. The Goals of art therapy. The meaning of colours. The structure of therapy. 3. Art therapy among children with mental, sense and physical disability. 4. Art therapy among adult individuals with mental, sense and physical disability. 5. Individual art therapy for blind people: haptic communication. 6. Individual art therapy of deaf people: hand gesticulation. 7. Art therapy for psychiatric diagnosis. 8. Art therapy application while dealing with an individual. 9. Group art therapy application. 10.Group discussion regarding results presentation gained during practical classes

Faculty:	**Faculty of Health Studies**
Course title:	***Surgery And Traumatology***
Course code:	KE / CHRE9
Level of course:	bachelor
ECTS:	3
Teacher:	MUDr. Karel Edelmann, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	18/0
Requirements on student:	Credit: active participation in the study, internship according to the possibility of orthopedic or traumatological outpatient department, operating room, passing a written test exam: oral exam
Course goal:	Brief history of the field. Knowledge of basic diagnostic and therapeutic procedures in surgery according to individual areas and disciplines with the application of the latest trends in relation to rehabilitation and occupational therapy. Comprehensive overview of diagnostics and subsequent conservative and operative treatment of locomotive trauma with emphasis on prevention and use of the latest surgical trends in traumatology in relation to subsequent occupational therapy.
Content:	Lecture Topics: 1. Surgery - general part, inflammations, tumors, shock, imperfect resuscitation. 2. Surgery - special section, cardiac surgery, chest surgery, breast tumors. 3. Surgery of the abdomen, urogenital system, surgery of the arteries and veins. 4. Traumatology - wounds, burns, skull and brain injuries. 5. Traumatology - injury of chest, abdomen. 6. Fractures - basic types, the most common fractures according to the location of conservative therapy, operative therapy. 7. Fractures - basic types, the most common fractures according to the location of conservative therapy, operative therapy. 8. Fractures - basic types, the most common fractures according to the location of conservative therapy, operative therapy. 9. Complications of healing of fractures, pelvis, upper and lower limbs.

Faculty:	**Faculty of Health Studies**
Course title:	***ERGOTHERAPY IN NEUROLOGY***
Course code:	KE/ ENEU9
Level of course:	bachelor
ECTS:	4
Teacher:	doc. MUDr. Jiří Votava, CSc., PhDr. Michal Vostrý, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	18/18
Requirements on student:	Credit: at least 80% active attendance at seminars, knowing the basis of neurological examination, training to assist the patient in a wheelchair or with severe hemiparesis. Exam: a written test
Course goal:	The course is conceived as theoretical and practical. It is a continuation of lectures of Neurology. Students will acquire theoretical and practical knowledge that will be applied in the field of ergotherapy for clients with neurological diagnoses in post-acute and chronic periods. Emphasis is placed on self-sufficiency training, hand therapy and pre-work rehabilitation.
Content:	Lecture Topics: 1. General goals of ergotherapy in neurological patients, expected return of lost functions. 2. Ergotherapy in stroke as a model of central palsy, modification of hand function. 3. Ergotherapy in wounds and tumors of the brain, MS, difference in age-related goals. 4. Ergotherapy for disorders of the extrapyramidal system and chronic infections. 5. Occupational therapy in children with cerebral palsy and other childhood diagnoses. 6. Ergotherapy after spinal cord injury. 7. Occupational therapy in peripheral paresis, especially in HK. Consequences of poliomyelitis. 8. Vertebrogenic syndromes. 9. Ergotherapeutic procedures in cognitive disorders, speech disorders, intellectual abilities. Seminar Topics: 1. Ergotherapy in stroke. 2. Familiarization with elements of facilitation methods, restitution and hand function substitution. 3. Ergotherapy in brain injury. 4. Ergotherapy in MS. 5. Training of cognitive functions, pre-work evaluation. 6. Ergotherapy in spinal lesion. 7. Functions of hand at tetraplegics, wheelchair movement and movement, possibility of sport. 8. Ergotherapy in cerebral palsy and other pediatric patients, training of games, self-sufficiency, continuity with school. 9. Occupational therapy in peripheral paresis on GC, using splints.

Faculty:	**Faculty of Health Studies**
Course title:	***Psychology***
Course code:	KE/ PSYE9
Level of course:	bachelor
ECTS:	2
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	1/1
Requirements on student:	progress test, oral exam
Course goal:	The subject includes the areas of psychological scientific disciplines: general psychology, personality psychology, developmental psychology; it develops the student's knowledge regarding health psychology and social psychology. Special emphasis is put on mental health of women and children including prevention of negative states in the society.
Content:	**Lecture Topics:** 1. Socialization of an individual. 2. Mechanism of socialization. 3. Agents of socialization. 4. Socio-pathological phenomena in the society. 5. Prevention of socio-pathological phenomena. 6. Social group, delimitation, classification. 7. Structure and dynamics of a group. 8. Social role and position, professional deformation and its prevention. 9. Family and its development. 10. Pathology of the family. 11. Dependency issues. **Seminar Topics:** 1.Social development of an individual. 2. Problems connected with mechanisms of socialization. 3. Relationships between agents of socialization. 4. Socio-pathological phenomena in the society. 5. Prevention of socio-pathological phenomena. 6. Management of social groups. 7. Goals, values, standards. 8. Social role and position, the process of identifying them. 9. Predictable and unpredictable crises. 10. Pathology of the family. 11. Transactional analysis.

Faculty:	**Faculty of Health Studies**
Course title:	***Music Therapy***
Course code:	KE/MUZE9
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Radka Beranová, DiS.
Term:	winter
Language of instruction:	English
Lectures/exercises:	1 hour per week
Requirements on student:	Active 80% attendance at seminars
Course goal:	Subject creates the music intervention to accomplish individualized goals and needs of patient. It introduces students with music therapy which can be used in occupational therapy. Music is used within a therapeutic relationship to address physical, emotional, cognitive, and social needs of individuals. After assessing the strengths and needs of each client, the music therapist provides the indicated treatment including creating, singing, moving to, and/or listening to music. Through musical involvement in the therapeutic context, clients' abilities are strengthened and transferred to other areas of their lives. Music therapy also provides avenues for communication that can be helpful to those who find it difficult to express themselves in words. Music therapy supports its effectiveness in many areas such as overall physical rehabilitation and facilitating movement, increasing people's motivation to become engaged in their treatment, providing emotional support for clients and their families, and providing an outlet for expression of feelings. The aim is to teach basic terminology of this discipline and gain general knowledge and important fact about music therapy for health treatment and educational goals in practice.
Content:	1 week Subject and task of music therapy 2 week Basic information about history and terminology 3 week practical exercises (creating music) 4 week practical exercises (listening music) 5 week practical exercise (moving to music) 6 week learning of skill of relaxation 7 week identifying of diagnosis and fit music therapy

Faculty:	**Faculty of Health Studies**
Course title:	***Kinesiology* II**
Course code:	KE/ KIE29
Level of course:	bachelor
ECTS:	3
Teacher:	doc. MUDr. Jiří Votava, CSc. ,
Term:	winter
Language of instruction:	English
Lectures/exercises:	9/18
Requirements on student:	Credit: active 80% attendance at seminars, written elaboration of kinesiological balance-sheet Exam: oral exam by lecture topics
Course goal:	The subject follows the knowledge gained in the subject Kinesiology I. It deals with the analysis of the function of the human organism systems, the application of physical analyzes in the health people within the framework of movement prevention activities and the application of this knowledge even in pathological circumstances. Attention is also paid to differential diagnostic considerations about the primary causes of functional dysfunctions in the locomotor system.
Content:	Lecture Topics: 1. Function of axial and postural system under difficult conditions and under pathological conditions. 2. Function of axial and postural system under difficult conditions and under pathological conditions. 3. Function of axial and postural system under difficult conditions and under pathological conditions. 4. Analysis of locomotive system function, hand function, analysis of communication system function 5. Analysis of locomotive system function, hand function, analysis of communication system function 6. Analysis of locomotive system function, hand function, analysis of communication system function 7. Functions of movement system in individual prototype activities, special pathokinesiology 8. Functions of movement system in individual prototype activities, special pathokinesiology 9. Functions of movement system in individual prototype activities, special pathokinesiology Exercise Topics: 1. PNF - proprioceptive neuromuscular facilitation 2. Panat method 3. Non-specific mobilization 4. Ball Facilitation 5. Bobath Concept - Handling 6. Joint mobilization - shoulder girdle 7. Joint mobilization - shoulder joint 8. Joint mobilization - wrist and hand 9. Joint mobilization - Hip and knee joint

Faculty:	**Faculty of Health Studies**
Course title:	***Practical bio-statistics***
Course code:	KE / 1PBS
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	0/2
Requirements on student:	exam
Course goal:	Analysis of bio-statistical data using specialized SW.
Content:	Statistical analysis can be provided by more or less specialized SW. The free product "R" is used in this course. Students first learn how to manage the data. Then the basic descriptive characteristics are performed and the classical analytical statistical tools employed to test and to model dependencies among variables. The course is taught in English. Preliminary theoretical knowledge of statistics is not required. The course ends with the practical analysis of bio-statistical data. 1. FW R-project. Downloading, basic principles, menus, help. 2. R-project. Inserting, re-calculating and saving the data. 3. Types of variables. Categorical variable – frequencies. 4. Continuous variable – quantile and moment characteristics. 5. Computer testing with the use of p-values. 6. Categorical variables – bivariate contingency tables, chi2-test of independency. 7. Continuous variables – t-tests. 8. Analysis of variance (ANOVA) – models and tests. 9. Regression models (1) – simple regression and correlation. 10. Regression models (2) – multiple regression. 11. Time series – description, models and forecasting. 12. Cluster analysis (distance measures, k-means clustering). 13. Survival analysis (survival function, tests, Cox regression).

Faculty:	**Faculty of Health Studies**
Course title:	***REHABILITATION OF COGNITIVE FUNCTIONS***
Course code:	KE / RKFE9
ECTS:	1
Level of course:	bachelor
Teacher:	PhDr. Michal Vostrý, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	9/9
Requirements on student:	Credit: active participation in lessons, 75% success in a credit test.
Course goal:	The subject is conceived as a practical one and it follows the lectures from the subject Neurology I, II and Theory of ergotherapy. It introduces the problems of ergotherapy in individuals with impaired cognitive functions. Emphasis is placed on mastering a quality examination of these individuals and determining subsequent occupational therapy intervention.
Content:	Seminar Topics: Teaching is supplemented with a demonstration of testing of specific patients, video samples from patients with cognitive disorders and practical testing of tests, individual tasks. 1. Cognitive functions - introduction, cognitive functions in higher cortical functions, neurorehabilitation and neuroplasticity, role of ergotherapist in rehabilitation of cognitive functions. 2. General rules and possibilities of examination of cognitive disorders in practice of ergotherapist. 3. Introduction to problems of individual functional systems. Classification, types of disorders and their manifestations in practice, possibilities of examination. 4. Orientation. 5. Attention + screening types of tests: Clock test, MMSE, Addenbrook cognitive test. 6. Memory functions. 7. Praxie. 8. Visual-function functions. 14. 9. Thought operations. Executive functions.

Faculty:	**Faculty of Health Studies**
Course title:	***Principles of bio-research***
Course code:	KE / 1PBR
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	1/0
Requirements on student:	exam
Course goal:	Basic principles of scientific research with an emphasis on healthcare science
Content:	The aim of the course is to introduce the basic principles of scientific research to students to enable them to carry out independently all the essential steps at the level required for their thesis as well as other future scientific activities, mainly in the field of healthcare sciences. The course is taught in English. The course ends with an oral exam. 1. Basic and applied research. Steps of the research project. 2. Research and search. Ethical aspects of bio-research (informed consent). 3. Clinical trials – types and examples (database ClinicalTrials.gov, EudraCT). 4. Clinical studies – types and examples (case report, case-control, cohort study). 5. Statistical survey – types and examples. 6. Statistical units, population parameters, statistical sample, representativeness. 7. Construction of questionnaire – types of variables (qualitative, quantitative, scales). 8. Interpretation of descriptive characteristics (frequencies, moments, quantiles). 9. Visualization of statistical results (tables, graphs). 10. Principles of statistical testing (research and statistical hypothesis, p-value). 11. Citations versus plagiarism. 12. Scientific journal database on internet (SCOPUS). 13. Impact factor. Database Web of Science.

Summer Term

Faculty:	**Faculty of Health Studies**
Course title:	***German language II***
Course code:	KE/NJE29
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Vratislava Postlová
Term:	summer
Language of instruction:	German
Lectures/exercises:	0/1
Requirements on student:	Written recherche elaborate of foreign professional resources. Active 80% attendance at seminary instructions.
Course goal:	The subject includes teaching of German to intermediate students aiming at professional language for healthcare sector. The goal is that a student is able to read, correctly pronounce and understand a professional text in German and he is able to follow the media offer either at home or abroad. Furthermore, the student will able to communicate in German within professional environment.
Content:	**Seminar Topics:** 1. Health care: the fields of activities 2. First aid I. 3. First aid II. 4. Medication: Side effects and addiction. 5. Healthy lifestyle I. 6. Healthy lifestyle II. 7. Rehabilitation in hospital. 8. Admittance and Discussion about anamnesis. 9. Teplice Spa. 10. Revision

Faculty:	**Faculty of Health Studies**
Course title:	***Therapeutic Techniques and Activities II***
Course code:	KE/TT2E9
Level of course:	bachelor
ECTS:	3
Teacher:	Mgr. Petra Pecharová, Mgr. Radka Beranová, Dis.
Term:	summer
Language of instruction:	English
Lectures/exercises:	1/2
Requirements on student:	Creating compensation aids and teaching aids to use in occupational therapy, the presentation of the aids, examination of the client by a selected test.
Course goal:	The subject provides students with basic knowledge of different types of human activities including materials and tools. Students get familiar with different types of work activities and their application for various types of disorders/illnesses, with individual devices used in occupational therapy. The subject is structured as practical. The analysis of individual activities makes it easier for students to decide how to use the aids in treatment rehabilitation regarding the goals of occupational therapy
Content:	**Seminar topics:** 1. Therapeutic procedures on the device Myro 2. Therapeutic procedures on the device Armeo Spring 3. Therapeutic procedures on the device BalanceTutor 4. Therapeutic procedures on the device Saebo, SaeboStim Micro 5. DOTCA-CH Battery, DLOTCA-G Battery, DYNAMIC LOTCA Battery 6. MABC-2 Battery, ACFS Battery,… 7. Art technique (analysis of therapeutic activity) 8. Art technique (analysis of therapeutic activity) 9. Art technique (analysis of therapeutic activity) 10. Presentation of a tool/aid produced. **Seminar Topics:** 1. – 10. Selected therapeutic techniques with a focus on manual activities, kinesiological analysis of therapeutic activities, creation of individual compensatory and teaching aids. Introduction to certified test batteries, introduction to devices used in occupational therapy

Faculty:	**Faculty of Health Studies**
Course title:	***The Theory of Occupational therapy***
Course code:	KE/TERG9
Level of course:	bachelor
ECTS:	5
Teacher:	doc. MUDr. Jiří Votava, CSc., Mgr. Petra Pecharová, Mgr. Radka Beranová, Dis.
Term:	summer
Language of instruction:	English
Lectures/exercises:	2/3
Requirements on student:	80% seminar attendance, continual demonstration of practical skills, creating and presenting seminar paper: "The evaluation of architectonic barriers in a public building and offering the project for removing them". "Monitoring the activities of Czech Association of Occupational Therapists and its events"
Course goal:	The aim of the subject is to familiarize the students with theoretical basis of occupational therapy and deepen their knowledge and skills which are necessary for modern occupational therapy as well as for comprehensive rehabilitation (where an occupational therapist is actively involved) for people with health disability.
Content:	**Lecture Topics:** 1.The parts of comprehensive occupational therapy, subsequent treatment rehabilitation, the role of an occupational therapist. 2. The theoretical basis of occupational therapy. 3. The example of a Canadian model and MOHO, basic values of occupational therapy. 4. International organization of occupational therapists, cooperation with Czech Association of Occupational Therapists. 5. Terminology in occupational therapy. 6. International classification ICF. 7. Classification of aids. 8. Occupational diagnostics, life quality. 9. The access for the disabled. 10. The differences in attitude towards children and people with sensory impairment. 11. Work with a family and a group. **Seminar Topics:** 1. The basics of Bobath concept when developing client's independence. 2. The basics of Bobath concept when developing client's independence. 3. The analysis of activities focused on the extent of movements and muscular strength, the assessment of hand function. 4. Analysis of activities focused on the extent of movements and muscular strength, assessment of hand function. 5. Kinesthetic mobilization. 6. Kinesthetic mobilization.. 7. The introduction of basal stimulation elements. 8. The introduction of basal stimulation elements. 9. Practical independence training according to specified types of disability. 10. Occupational therapy plan.

Faculty:	**Faculty of Health Studies**
Course title:	***Art Therapy II***
Course code:	KE/ART25
Level of course:	bachelor
ECTS:	1
Teacher:	PhDr. Hana Kynštová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/1
Requirements on student:	80% of seminar attendance. Artwork analysis dealing with issues of person with health disabilities
Course goal:	The subject follows the subject course Art Therapy I and provides extended information about possibilities of applying art therapy techniques to children and adults with mental, movement and sensory disability. Students are trained to lead a selected art therapeutic program.
Content:	**Seminar Topics:** 1. Art therapy in the Czech Republic and in the world. 2. Group art therapy application in occupational therapy. 3. Group art therapy application in psychotherapy. 4. – 7. Art therapy program led by students and subsequent analysis of the intervention.

Faculty:	**Faculty of Health Studies**
Course title:	***Information Systems***
Course code:	KE / ISE9
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Nela Kubová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/10
Requirements on student:	Credit: The basic assumption the attendance (min. 80% participation in direct teaching). Another assumption is active work (checking the elaboration of continuously assigned tasks using the e-learning environment Moodle).
Course goal:	The subject fulfills two main goals. The first one is to ensure that students are able to master all the tasks associated with the preparation of their bachelor thesis. The second goal is to acquaint students with the possibilities of using information systems (IS) in health care.
Content:	Seminar Topics: 1. E-learning: Functions and types of e-learning system, access to e-learning (Moodle, MEFANET). 2. Keyboard shortcuts (use Ctrl + H for substitutions). PowerPoint (slide transitions, animation usage). 3. Word: Divide a document into sections and different page numbering types in sections. 4. Word: Headings and content generation, citation and literature review. 5. Excel: Automatic Sequences, Absolute / Relative Reference, Partition Anchorage, Multicriterial Data Sorting. 6. Excel: Function = sum, selected text and logic functions. Graphs and their modifications. 7. General principles and trends of E-health, principles and examples of use of telemedicine. 8. EHR (EPR) - electronic health (patient) record, its standards. 9. IS in health care and in hospitals (functions, demonstrations). 10. IS - image information (acquisition, storage, processing).

Faculty:	**Faculty of Health Studies**
Course title:	***Medical psychology***
Course code:	KE/ ZPSE5
Level of course:	bachelor
ECTS:	3
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	1/2
Requirements on student:	Student gains credit for at least 80% of active attendance in seminars. Further students demonstrate familiarization with given issues in written form. Spoken form of the exam.
Course goal:	The subject is the part of psychology and introduces the issues of medical psychology. It deepens the knowledge which is important for professional dealing with difficult situations in care after patients with individual needs, with handicaps and dying patients, as well as it helps with keeping the mental balance of the care provider himself.
Content:	**Lecture Topics:** 1. Psychological issues of an illness/disorder. 2. Psychosomatic and somatopsychic relations, autoplastic illness image. 3. Experiencing the illness in time, relation of an ill person to the illness. 4. The category of ill people from the psychological point of view. 5. Psychological issues of hospitalization, iatropatogeny, sororigeny a egrotogeny. 6. Professional deformation, the danger of burn-out syndrome development. 7. Stress, the psychology of pain. 8. The types of disability and psychological attitude towards clients. 9. Anxiety, fear. 10. The principles of professional behaviour. **Seminar Topics:** 1. Productive and non-productive behaviour, a health care provider as a client. 2. Psychotherapy in health care work. 3. Illness as a difficult life situation. 4. Communication with an ill client. 5. Communication within a social network of a client. 6. Non-adaptive personality demonstrations, non-productive behaviour. 7. Productive behaviour and its manifestations. 8. The attitude percularities towards the clients in some departments: internal, surgical. 9. The attitude percularities towards the clients in some departments: gynaecological and neurological. 10.Sharing sad news

Faculty:	**Faculty of Health Studies**
Course title:	***The Investigation Methods II***
Course code:	KE / ZE29
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	20/20
Requirements on student:	Credit: protocol processing - Janda muscle test. Active 80% attendance at seminars. Exam: written test
Course goal:	The subject is designed as theoretical - practical. It provides students with information on the basic methods of examination of the locomotor system and the goals of physiotherapy. The knowledge acquired in the teaching of this subject is a prerequisite for successfully mastering treatment procedures, which are the basis for studying other occupational therapy subjects.
Content:	Lecture topics: (2 hours) 1. Muscle test according to Janda ? upper limb. 2. Muscle test according to Janda - hand. 3. Muscle test according to Janda ? lower limb. 4. Muscle test according to Janda ? leg. 5. Muscle test according to Janda ? torso and facial muscles. 6. Anthropometry of the upper limb. 7. Goniometry of the upper limb. 8. Investigation of hypermobility and shortened structures. 9. Investigation of movement stereotypes. 10. Repetition. Exercise topics: (2 hours) 1. Muscle test according to Janda ? upper limb. 2. Muscle test according to Janda - hand. 3. Muscle test according to Janda ? lower limb. 4. Muscle test according to Janda ? leg. 5. Muscle test according to Janda ? torso and facial muscles. 6. Anthropometry of the upper limb. 7. Goniometry of the upper limb. 8. Investigation of hypermobility and shortened structures. 9. Investigation of movement stereotypes. 10. Repetition.

Faculty:	**Faculty of Health Studies**
Course title:	***Ergotherapy In Geriatrics***
Course code:	KE/EG9
Level of course:	bachelor
ECTS:	2
Teacher:	PhDr. Alena Charvátová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/18
Requirements on student:	Credit: active 80% attendance at exercises, written casuistics and credit test.
Course goal:	The course is conceived as theoretical and practical. The student is able to propose a therapy plan based on the senior's functional status. Emphasis is placed on maintaining adequate functional abilities, maintaining senior's self-sufficiency and active lifestyle. The student is able to apply the acquired theoretical knowledge in practice in the field of geriatrics.
Content:	Exercise Topics: 1. Introduction to the subject - use of ergotherapy in geriatrics. 2. Cooperation of individual health and social professions. 3. Occupational Therapy in Seniors' Homes - Occupational Therapist's Work in Functional Therapy. 4. Occupational therapy in gerontopsychiatry-affecting the course of the disease. 5. Problems of apoplektic insult-causes, therapeutic goals. 6. Problems of apoplektic insult - therapeutic methods. 7. Parkinson's Disease-Treatment Goals. 8. Problems of Parkinson's disease, therapeutic methods, means. 9. Problems of old-age depression, organically conditioned old-age psychody. Alzheimer's disease - therapeutic goals, therapeutic methods.

Faculty:	**Faculty of Health Studies**
Course title:	***KINESIOLOGY I***
Course code:	**KE / KIE19**
ECTS:	2
Level of course:	bachelor
Teacher:	doc. MUDr. Jiří Votava, CSc.
Term:	winter
Language of instruction:	English
Lectures/exercises:	18/9
Requirements on student:	Credit: 80% attendance at exercises, protocol making - axial system
Course goal:	The course builds on the knowledge gained in anatomy, biomechanics and neurophysiology. It deals with the general function of the joint and its skeletal muscles in connection with their involvement in complex movements such as walking, running, stereotypes of everyday life, which it analyzes for their normal and pathological function. It provides information on ontogenetic development of human movement.
Content:	Lecture Topics: 1. Basic concepts, introduction to the subject, basic assumptions of anatomy, biomechanics and neurophysiology. 2. Ontogenesis of movement development, movement as an output function of organism. 3. Functional barriers of the joint, structural and functional patterns of the joint, pattern and non-specimen muscles as a basis for the diagnosis of physiological and pathological movement. 4. Muscle contraction, biomechanical parameters, concentric, isometric and eccentric contractions. 5. Functional muscle chains. 6. Involvement of upper and lower limbs, individual joints into flexion and extension chains. 7. Involvement of the spine, phasic and postural muscles in the flexion and extension chains. 8. Projection of internal organs of muscle chains through autonomous reflexes. 9. Proprioceptors, their influence on muscle tension. Somatic and visceral pain, their effect on movement changes. Exercise Topics: 1. Introduction, basic terminology, anatomy, biomechanics, algorithm of mobilization techniques 2. Joint mobilization - shoulder joint 3. Joint mobilization - wrist and hand 4. Repetition 5. Joint mobilization - hip joint 6. Joint mobilization - knee joint 7. Joint mobilization - ankle joint 8. Joint mobilization - others (pelvis, etc.) 9. Repetition

Faculty:	**Faculty of Health Studies**
Course title:	***Summer Cycling Course***
Course code:	KE/LTVE9
Level of course:	bachelor
ECTS:	1
Teacher:	PhDr. Alena Charvátová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	5 days
Requirements on student:	Active course participation. Active participation in cycling training for people with disability.
Course goal:	The content of the course is to familiarize the students both practically and theoretically with the basics of hiking and cycling by means of the course organized in nature.
Content:	Content specialization: Didactics and assistance of hand bike ride. Didactics of sports in nature of visually impaired people. Didactics of sports in nature of people with hearing impairments. Accompanying/additional activities.

Faculty:	**Faculty of Health Studies**
Course title:	***Practical bio-statistics***
Course code:	KE / 1PBS
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	0/2
Requirements on student:	exam
Course goal:	Analysis of bio-statistical data using specialized SW.
Content:	Statistical analysis can be provided by more or less specialized SW. The free product "R" is used in this course. Students first learn how to manage the data. Then the basic descriptive characteristics are performed and the classical analytical statistical tools employed to test and to model dependencies among variables. The course is taught in English. Preliminary theoretical knowledge of statistics is not required. The course ends with the practical analysis of bio-statistical data. 1. FW R-project. Downloading, basic principles, menus, help. 2. R-project. Inserting, re-calculating and saving the data. 3. Types of variables. Categorical variable – frequencies. 4. Continuous variable – quantile and moment characteristics. 5. Computer testing with the use of p-values. 6. Categorical variables – bivariate contingency tables, chi2-test of independency. 7. Continuous variables – t-tests. 8. Analysis of variance (ANOVA) – models and tests. 9. Regression models (1) – simple regression and correlation. 10. Regression models (2) – multiple regression. 11. Time series – description, models and forecasting. 12. Cluster analysis (distance measures, k-means clustering). 13. Survival analysis (survival function, tests, Cox regression).

Faculty:	**Faculty of Health Studies**
Course title:	***Principles of bio-research***
Course code:	KE / 1PBR
ECTS:	5
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter, summer
Language of instruction:	English
Lectures/exercises:	1/0
Requirements on student:	exam
Course goal:	Basic principles of scientific research with an emphasis on healthcare science
Content:	The aim of the course is to introduce the basic principles of scientific research to students to enable them to carry out independently all the essential steps at the level required for their thesis as well as other future scientific activities, mainly in the field of healthcare sciences. The course is taught in English. The course ends with an oral exam. 1. Basic and applied research. Steps of the research project. 2. Research and search. Ethical aspects of bio-research (informed consent). 3. Clinical trials – types and examples (database ClinicalTrials.gov, EudraCT). 4. Clinical studies – types and examples (case report, case-control, cohort study). 5. Statistical survey – types and examples. 6. Statistical units, population parameters, statistical sample, representativeness. 7. Construction of questionnaire – types of variables (qualitative, quantitative, scales). 8. Interpretation of descriptive characteristics (frequencies, moments, quantiles). 9. Visualization of statistical results (tables, graphs). 10. Principles of statistical testing (research and statistical hypothesis, p-value). 11. Citations versus plagiarism. 12. Scientific journal database on internet (SCOPUS). 13. Impact factor. Database Web of Science.

Faculty:	**Faculty of Health Studies**
Course title:	***ERGONOMICS***
Course code:	KE / ENE9
ECTS:	1
Level of course:	bachelor
Teacher:	PhDr. Michal Vostrý, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	6/12
Requirements on student:	credit: 80% attendance and active participation in teaching, 75% of credit test.
Course goal:	The course is conceived as theoretical - practical. Students will be acquainted with the evaluation of working conditions, physical, chemical and biological factors of the working environment of their influence on health, assessment of health risks, categorization of work, with the basics of work physiology and ergonomics, with evaluation of physical and sensory workload and with the principles of measures to protect workers health.
Content:	Lecture Topics: 1. Hygiene work - goals, methods of work, realization in practice. 2. Physical, chemical and biological factors in the working environment, their impact on health and prevention. 3. Health risk assessment, risky work, medical preventive examinations. 4. Hygiene of work in individual activities within ergotherapy. Physiology of work; physical, sensory, mental workload. 5. Ergonomics - goals, methods of work, ergonomic programs, handling of loads, ergonomic principles, adjustment of jobs. 6. Diseases of DNJZ and their prevention, intervention programs and health promotion in the workplace. Seminar Topics: 1. Hygiene work - goals, methods of work, realization in practice. Hygiene of work in individual activities within ergotherapy. 2. Physical, chemical and biological factors in the working environment, their impact on health and prevention. 3. Health risk assessment, risky work, medical preventive examinations. 4. Physiology of work; Physical, sensory, mental workload. Load Handling, Ergonomic Workplace Adjustment Principles. 5. Ergonomics - goals, methods of work, ergonomic programs. 6. Diseases of DNJZ and their prevention. Intervention programs and workplace health promotion.

Faculty:	**Faculty of Health Studies**
Course title:	***ERGODIAGNOSTICS AND WORKING REHABILITATION***
Course code:	KE / EPRE9
ECTS:	2
Level of course:	bachelor
Teacher:	doc. MUDr. Jiří Votava, CSc. ,
Term:	winter
Language of instruction:	English
Lectures/exercises:	12/12
Requirements on student:	credit: verification of practical professional skills in ergodiagnostic assessment obtained during the seminars exam: oral exam from set thematic areas and evaluation of assigned work (elaboration of model activity).
Course goal:	The subject is conceived as theoretical-practical and follows subjects of occupational therapy. It presents a program of ergodiagnostic assessment in order to determine the prerequisites for working inclusion. It describes the system of work rehabilitation, coordinated Labor Offices and the possibility of getting a job with a disabled person in a sheltered job or in supported employment.
Content:	Lecture Topics: 1. The system of ergodiagnostic evaluation of a patient by a rehabilitation team. 2. Modeling activities. 3. Ergodiagnostic tests and their further use. 4. Concept of work rehabilitation, legislative basis. 5. Possibility of employment by type of disability. Supported employment, sheltered workshops. 6. Abilympiáda. Relationship to ergonomics. Seminar Topics: 1. Participation of students in ergodiagnostic assessment. 2. Participation of students in ergodiagnostic assessment. 3. Working with case reports of patients before dismissal-suggestions for inclusion. 4. Working with case reports of patients before dismissal-suggestions for inclusion. 5. Work in sheltered workshops. 6. Determining the preconditions for labor integration through Labor Offices.

Faculty:	**Faculty of Health Studies**
Course title:	***PROSTHETICS***
Course code:	KE / PROT9
ECTS:	3
Level of course:	bachelor
Teacher:	PhDr. Michal Vostrý, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	12/6
Requirements on student:	credit: active 80% attendance at seminars, demonstration of practical and professional knowledge, credit test, exam: written exam
Course goal:	The subject provides professional knowledge and knowledge of prosthetics so that students understand the complexity of diagnostics and treatment options. It is focused on limb prosthesis, orthotics, calceotics, and adjuvant. Students will use the information in professional practice.
Content:	Lecture Topics: 1. Introduction to the subject. Concepts. 2. Upper limb amputation. 3. Lower limb amputation. 4. Upper limb prostheses 5. Lower limb prostheses 6. Orthotics, calceotics, adjuvatics Seminar Topics: 1. Care for amputation stub 2. Prosthetic manipulation training 3. School of walking, training of falls 4. Specifics of ergotherapy in amputated therapy 5. Internship at the prosthetic department. 6. Internship at the prosthetic department.

Faculty:	**Faculty of Health Studies**
Course title:	***RESEARCH METHODS IN ERGOTHERAPY***
Course code:	KE / VME9
ECTS:	1
Level of course:	bachelor
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	0/9
Requirements on student:	Credit: demonstration of practical skills (research activity in electronic databases, work with Excel).
Course goal:	The subject follows the subject Methods of scientific work with the principles of publishing and continues with selected possibilities of statistical analysis. The aim of the course is to provide students with practical instructions how to proceed with the bachelor thesis.
Content:	Seminar Topics: 1. Principles of publishing: Search, ISBN and ISSN, review process, impact factor. 2. Ethics of Publishing: Copyright Law, Citation Standards. 3. Working with e-catalog of UJEP library, with MEDVIK database and e-catalog of Krajské zdravotní, a.s. 4. Basics of working with databases Web of Science, SCOPUS, NursingOvid. 5. Introduction to data analysis: Gauss curve, population parameters, statistical hypotheses, significance level. 6. Selected samples of statistical tests: Paired t-test (Excel - TTEST command). 7. Selected examples of statistical tests: Two-sample t-test (Excel - TTEST command). 8. Selected statistical samples: chi-square type tests (Excel - CHITEST command). 9. Basics of linear regression and correlation: Model of regression line (Excel - INTERCEPT commands, SLOPE).

Faculty:	**Faculty of Health Studies**
Course title:	***ORTHOPEDICS AND PROTETHICS***
Course code:	KE / ORPE9
ECTS:	3
Level of course:	bachelor
Teacher:	MUDr. Karel Edelmann, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	18/9
Requirements on student:	Credit: active participation in the study, internship according to the possibility of orthopedic or traumatological outpatient department, operating room, successful completion of written test - 70%, exam: oral.
Course goal:	Comprehensive overview of diagnostics and treatment of musculoskeletal disorders with emphasis on prevention and in relation to physiotherapy. Complex overview of spondylosurgical problems degenerative and traumatic. An overview of the basics of prosthetic issues and the use of prosthetic aids in connection with rehabilitation and return of patients to society.
Content:	Lecture Topics: 1. Systemic skeletal diseases, birth defects. 2. Inflammations of joints and bones, tumors, avascular necrosis. 3. Osteoarthritis, joint replacements. 4. Soft knee injury and illness, arthroscopy. 5. Spondylosurgery, poor posture, scoliosis, Scheurmann's disease. 6. Degenerative diseases of the spine, injuries of the spine. 7. Static defects of limbs. 8. Upper and lower limb amputations, upper and lower limb prostheses. 9. Orthotics, calceotics, adiuvatika. Exercise Topics: 1. Upper limb prostheses. 2. Lower limb prostheses. 3. Orthotics, calceotics, adiuvatika. 4. Internship at the traumatology clinic. 5. Internship at orthopedic clinic. 6. Internship at orthopedic pediatric clinic. 7. Operating theater internship. 8. Operating theater internship. 9. Internship at the prosthetic department.

PHYSIOTHERAPY
Winter Term

Faculty:	**Faculty of Health Studies**
Course title:	***Physiotherapy I***
Course code:	KF/FZ19
Level of course:	bachelor
ECTS:	3
Teacher:	PhDr. Kateřina Tichá, Ph. D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	2/3
Requirements on student:	Active participation in seminars - 80% Demonstration of acquired practical skills Written credit test, other oral terms PREREQUISITES FOR THE KF/ ANF29 SUBJECT
Course goal:	The course is conceived as theoretically - practical, it is a basic branch subject. It introduces students to the pathogenesis of functional disorders of the musculoskeletal system, to the methods used in rehabilitation and to physiotherapeutic procedures in individual clinical subjects. Student will apply the knowledge in professional practice. The aim is to use the knowledge of individual processes and methods and to apply the correct choice according to clinical conditions.
Content:	**Lecture topics** 1.Introduction, basic terminology. 2.Physiotherapeutic procedures at ARU and ICUs. 3.Respiratory Physiotherapy (Drainage Techniques, Relief Locations, Breath Trainers) 4. Functional examination of lungs - spirometry and static and dynamic pulmonary volumes, stress spiroergometry. 5. Respiratory Physiotherapy - Procedures for Chronic Respiratory Deficiency (COPD). 6. Physiotherapeutic procedures in the pediatric indication area - respiratory system diseases in childhood (asthma bronchiale, cystic fibrosis). 7. Physiotherapeutic procedures in osteoporosis. 8. Physiotherapeutic procedures in gynecology. 9. Physiotherapy for burns. **Seminar topics:** 1.Kinesiological analysis. 2.Cervical and thoracic spine automobilisation. 3.Lumbar spine and pelvis automobilisation. 4.Brugger's concept: theraband application. 5.Respiratory physiotherapy: respiratory hygiene techniques, assisting tools and their application, expectoration support). 6.Sensomotorics: basic principles. 7.Sensomotorics: unstable surfaces and their application. 8.The method of L. Mojžíšová (the principles of Mojžíšová method, indications and contraindications of Mojžíšová method, exercising unit according to Mojžíšová method, rib palpation: anterior, posterior and spasm palpation, abdomen, hip adductors, gluteal muscles, coccyx palpation.

Faculty:	**Faculty of Health Studies**
Course title:	***Physiotherapy III***
Course code:	KF/FZ39
Level of course:	bachelor
ECTS:	4
Teacher:	PhDr. Eva Buchtelová, Ph. D., PhDr. Kateřina Tichá, Ph. D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	2/3
Requirements on student:	Active participation in seminars - 80% Demonstration of practical skills Oral examination of credit
Course goal:	The course is conceived as theoretically - practical, it is a basic branch subject. It introduces the students to pathogenesis of functional disorders of the musculoskeletal system, to the methodologies and concepts used in physiotherapy in individual indicated areas. Student will apply the knowledge and the skills gained in professional practice. The aim is to use the knowledge of individual processes and methods in clinical fields.
Content:	Lecture Topics: 1. Physiotherapy - traumatology in the area of ??the upper limb (fractures in the region of the blade, collarbone and proximal end of the humerus. 2. Physiotherapy - Traumatology in the area of ??the upper limb (fractures in the distal humerus, elbow, forearms, wrists and hands). 3. Physiotherapy - traumatology in the pelvic circle and spine. 4. Developmental defects of the hip joint - VDK, M. Perthes, coxa vara adolescentia 5. Spinal defects - dorsum planum, M. Scheuermann, scoliosis. 6. Congenital and acquired defects of legs and fingers. 7. Painful shoulder syndrome (impingement sy tests, rotator cuff disorders, instability). 8. Injury of the tendon apparatus of the hand (flexor and extensor apparatus). 9. Entezopathy. 10. Repetition. Seminar topics: 1. PNF - lower limb -1. diagonal DK. 2. PNF - Lower limb. -2. diagonal DK. 3. PNF - Hull, pelvis and head. 4. PNF - booster and relaxation techniques. 5. The subject of physiotherapy in the lower limb area 6. The subject of physiotherapy in the upper limb area 7. Acral coactivation therapy - basic principles, ventral and dorsal chains, acer settings 8. Acral Coactivation Therapy - Exercise based on developmental kinesiology 9. Repeat

Faculty	**Faculty of Health Studies**
Course title:	***Winter Skiing Course***
Course code:	KF/ZTF9
Level of course:	bachelor
ECTS:	1
Teacher:	Hana Kynštová, Ph. D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	5 days
Requirements on student:	Active participation in ski training course for the impaired.
Course goal:	The idea of the course is to familiarize the students both theoretically and practically, within the skiing course, with the basics of downhill and cross-country skiing. The emphasis will be put on teaching of Czech school of skiing: downhill and slalom technique for alpine skiing and classic and skate skiing style when teaching cross-country skiing. The goal of the training is to have the ability to apply individual skiing skills when teaching skiing to disabled people.
Content:	Content specialization: Didactics and assistance of monoski ride. Skiing didactics for visually impaired people. Skiing didactics for people with hearing impairments. Accompanying/additional activities.

Faculty	**Faculty of Health Studies**
Course title:	***Biophysics***
Course code:	KF / BF9
Level of course:	bachelor
ECTS:	1
Teacher:	prof. RNDr. Stanislav Novák, CSc.
Term:	winter
Language of instruction:	English
Lectures/exercises:	10/0
Requirements on student:	Credit: active participation in lessons, written test. Exam: oral
Course goal:	The course provides basic information concerning the subject of biophysics. The aim of the course is to acquaint students with selected areas of biophysics - basic knowledge of physics and its use in medicine.
Content:	Lecture topics: 1. Introduction to biophysics, structure of matter, interaction, phenomena at the interface of two environments, transport phenomena. 2. Energy conversion in organism. 3. Heat and temperature, biophysical aspects of temperature regulation, use of heat and cold in therapy. 4. Basics of acoustics, sound and ultrasound and their propagation, noise and audiometry, medical applications. 5. Biophysics of electrical manifestations and effects of electrical currents, diagnostic and therapeutic methods. 6. Biological membranes, resting and action membrane potential, electric current, activity potentials. 7. Optics, biophysics of vision, light propagation and basics of optical imaging, medical devices using optical methods. 8. Electromagnetic field and its interaction with organism, magnetotherapy. 9. Ionizing radiation in medicine, X-ray radiation, X-ray computer tomography, radiotherapy. 10. Laser. Magnetic resonance.

Faculty	**Faculty of Health Studies**
Course title:	***Psychology***
Course code:	KF / PSFY9
Level of course:	bachelor
ECTS:	3
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	10/10
Requirements on student:	Credit: control test Exam: oral
Course goal:	The subject includes knowledge of psychological disciplines - general psychology, personality psychology, developmental psychology and extends the student's knowledge of social psychology, effective communication and coping with difficult life situations. Particular emphasis is placed on the mental health of women and children, including the prevention of negative conditions in society.
Content:	Lecture Topics: 1. Perception 2. Thinking 3. Consciousness 4. Attention and memory 5. Emotions 6. Personality and its structure 7. Characteristics of personality 8. Individual Development (Erikson) 9. Family and its development Seminar Topics: 1. Socialization of human individual 2. Socialization mechanisms 3. Family pathology 4. Effective communication 5. Barriers in communication 6. Frustration, deprivation 7. Conflict 8. Stress 9. Burnout issues

Faculty	**Faculty of Health Studies**
Course title:	***Psychology***
Course code:	KF / CHRF9
Level of course:	bachelor
ECTS:	3
Teacher:	MUDr. Karel Edelmann, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	0/18
Requirements on student:	Credit: active participation in the study, internship according to the possibility of orthopedic or traumatological outpatient department, operating room, passing a written test - 70% exam: oral exam
Course goal:	Brief history of the field. Knowledge of basic diagnostic and therapeutic procedures in surgery according to individual areas and disciplines with the application of the latest trends in connection with rehabilitation and physiotherapy. Comprehensive overview of diagnostics and subsequent conservative and operative treatment of musculoskeletal traumas with an emphasis on prevention and use of the latest surgical trends in traumatology in relation to subsequent physiotherapy.
Content:	Lecture Topics: 1. Surgery - general part, inflammations, tumors, shock, imperfect resuscitation. 2. Surgery - special section, cardiac surgery, chest surgery, breast tumors. 3. Surgery of the abdomen, urogenital system, surgery of the arteries and veins. 4. Traumatology - wounds, burns, skull and brain injuries. 5. Traumatology - injury of chest, abdomen. 6. Fractures - basic types, the most common fractures according to the location of conservative therapy, operative therapy. 7. Fractures - basic types, the most common fractures according to the location of conservative therapy, operative therapy. 8. Fractures - basic types, the most common fractures according to the location of conservative therapy, operative therapy. 9. Complications of healing of fractures, pelvis, upper and lower limbs.

Faculty:	**Faculty of Health Studies**
Course title:	***Methods of Kinesiotherapy I***
Course code:	KF/MK19
Level of course:	bachelor
ECTS:	5
Teacher:	Mgr. Alena Charvátová, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	18/27
Requirements on student:	Credit: active 80% participation in class exercises, demonstration of practical skills, Exam: written test.
Course goal:	The course builds on the information gained in the subjects profiling the basis of the study program of physiotherapy and provides knowledge of modern methods of movement therapy. In the form of theoretical - practical students will acquire these methods and use them in professional practice. The aim is to gain theoretical background and master practical skills that are part of physiotherapeutic procedures.
Content:	Lecture topics: 1. Introduction to the subject Kinesiotherapy methods (explanation of basic terms - PIR, PFS, RI). 2. Techniques of soft tissues (examination and treatment of skin, subcutis, fascia). 3. Proprioceptive neuromuscular facilitation. 4. The concept of buckling exercises according to R. Brunkow / Acral coactivation therapy. 5. Sensomotor stimulation. 6. Brügger concept. 7. Klapp climbing. 8. SMS moves according to MUDr. Smíšek. 9. Repetition Exercise topics: 1. Examination and treatment of soft tissues (skin, subcutaneous tissue, fascia). 2. Examination and treatment of soft tissues (PIR of trunk muscles and DK). 3. Examination and treatment of soft tissues (PIR muscle HK). 4. Traction. 5. Examination and mobilization in the pelvis. 6. Examination and mobilization of peripheral joints DK. 7. Examination and mobilization of peripheral joints DK. 8. Examination and mobilization of peripheral joints HK. 9. Examination and mobilization of peripheral joints HK.

Faculty:	**Faculty of Health Studies**
Course title:	***Ergotherapy***
Course code:	KF/ERGF9
Level of course:	bachelor
ECTS:	1
Teacher:	doc. MUDr. Jiří Votava, CSc.
Term:	winter
Language of instruction:	English
Lectures/exercises:	9/0
Requirements on student:	Credit: verification of professional knowledge and skills of continuity of physiotherapy and ergotherapy - development of case reports. Exam: written exam from given topics
Course goal:	The course is concipated as theoretical and practical. Students will gain knowledge about the profession of ergotherapist, his position in the rehabilitation team, his examination and therapeutic methods. They will know the importance of evaluating and practicing self-sufficiency, using and prescribing compensatory aids. They will become acquainted with the assessment of the environment and the quality of life of people with disabilities. They will understand the participation of occupational therapist in pre-work rehabilitation, types of activities and organization of work in occupational therapy workshops.
Content:	Lecture topics: 1. Ergotherapy - definition, current conception and position of ergotherapy in the world and in the Czech Republic. 2. Ergotherapy focused on training self-sufficiency, ADL, aids. 3. Ergotherapy focused on the upper limb, examination of the hand and grip, use of splints. 4. Ergotherapy in psychiatry and geriatrics. 5. Ergotherapy in cognitive disorders. 6. Approaches of ergotherapy in typical clinical diagnoses and disabilities. 7. Evaluation of environment, removal of architectural barriers. 8. Functional occupational therapy, types of activities and work organization in occupational therapy workshops. 9. Ergotherapeutic approaches in children.

Faculty:	**Faculty of Health Studies**
Course title:	***Social and occupational rehabilitation***
Course code:	KF/SPRF9
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Ivana Štolová
Term:	winter
Language of instruction:	English
Lectures/exercises:	0/9
Requirements on student:	Credit: 80% active participation in seminars. Elaboration and presentation of the topic according to the teacher's instructions. Final written test.
Course goal:	The aim of the course is to acquaint students with the issues of social and occupational rehabilitation, procedures and means of vocational rehabilitation and inclusion of persons with disabilities in the work process. The importance of social rehabilitation as a tool in integrating people with long-term illness into the system of psychosocial rehabilitation. Further, to acquaint students with social service providers and organizations enabling occupational rehabilitation in the Ústí region.
Content:	Seminar topics: 1. Current international classification of disability. 2. Organization of comprehensive rehabilitation and its implementation. 3. Social rehabilitation - goals and means. 4. Occupational rehabilitation - aims and means. 5. Interconnection of social and occupational rehabilitation. 6. Introduction to facilities providing social and occupational rehabilitation in the Czech Republic and abroad. 7. Ergodiagnostic examination. 8. Inclusion of persons with disabilities in the work process. Retraining. 9. Analysis of workplaces and work activities. Profesiograms.

Faculty:	**Faculty of Health Studies**
Course title:	***Medical Psychology***
Course code:	KF/NOF9
Level of course:	bachelor
ECTS:	3
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	9/9
Requirements on student:	Credit: student gets credit for at least 80% of active participation in seminar and demonstration orientation in given issue in written form. Exam: oral.
Course goal:	The course is dconcipated as theoretical and practical. It deals with psychology of clients and their families in health and illness. Knowledge of medical psychology will contribute to better understanding of patients and clients of healthy and ill people and to understanding their needs and problems.
Content:	Lecture topics: 1. Psychological problems of illness. 2. Psychosomatic and somatopsychic relations, autoplastic picture of the disease. 3. Experiencing illness in time, ratio of patient to illness. 4. Psychological problems of hospitalization, iatropatogenia, sororigenia and egrotogenia. 5. Professional deformation, danger of burn-out syndrome. 6. Stress, psychology of pain. 7. Types of disability and psychological approach to clients. 8. Anxiety, fear. 9. Principles of professional behavior. Seminar topics: 1. Productive and unproductive behavior, medic as a client. 2. Psychotherapy in medical work. 3. Illness as a difficult life situation. 4. Communication with sick client. 5. Communication within the client's social network. 6. Non-adaptive nature, unproductive behavior. 7. Productive behavior and its manifestations. 8. Special features of approach to clients in individual departments - internal, surgical. 9. Peculiarities of approach to clients in individual departments - gynecological and neurological.

Faculty:	**Faculty of Health Studies**
Course title:	***The Basics Of Health Law***
Course code:	KF/ZZF9
Level of course:	bachelor
ECTS:	1
Teacher:	JUDr. Zdeněk Grus
Term:	winter
Language of instruction:	English
Lectures/exercises:	9/0
Requirements on student:	credit: seminar paper, control tests.
Course goal:	The subject informs about law and legislation and introduces valid legislation related to the system of health and social services, rights and duties of health professions, patients / clients and state administration bodies. It includes areas of professional legislation in the work of a nurse.
Content:	Lecture Topics: 1. Introduction to legal issues, concept of law, creation of legal norms. 2. System of laws in the Czech Republic. Constitution, Charter of Human Rights and Freedoms. 3. Harmonization of Czech and EU legal norms and their relation to health care. 4. Family, Social Care Act and Social Services Act 5. Social security system in the Czech Republic. 6. Responsibility for health care. 7. Labor Code - Basic Provisions. 8. Criminal law and its foundations. 9. Offenses in the area of health and the basics of the law.

Faculty:	**Faculty of Health Studies**
Course title:	***General Neurophysiology***
Course code:	KF/NOF9
Level of course:	bachelor
ECTS:	3
Teacher:	doc. MUDr. Aleš Hejčl, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	18/0
Requirements on student:	Credit: attendance at lectures Exam: written test - verification of knowledge from the content of the subject General neurophysiology
Course goal:	The course builds on the knowledge gained in the functional anatomy of the locomotor and nervous systems, and further extends it, especially in relation to clinical practice. Students will acquire knowledge of central mechanisms of motor and locomotive control from a clinical point of view, as well as other functions such as fatal functions, senses, etc. The student should understand the basic physiological functions of CNS, neuron physiology and functional manifestations of the nervous system. Students will use this information in other professional subjects.
Content:	Lecture Topics: 1. Transmission and processing of information in the CNS. 2. Basic principles of control process. 3. Function control at CNS level - spinal. 4. Function control at CNS level - stem. 5. Control of function at CNS level - subcortical. 6. Control of function at CNS level - cortical. 7. Control of postural function, locomotion, deft momentum, communication function. 8. Control of postural function of deft momentum, communication function. 9. Communication function, senses.

Faculty:	**Faculty of Health Studies**
Course title:	***Physical Education and Didactics I***
Course code:	KF/TVF19
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Veronika Kvochová, Mgr. Zuzana Lhotská
Term:	winter
Language of instruction:	English
Lectures/exercises:	1/2
Requirements on student:	Graphic presentation of an exercise unit. Active 80% participation in seminars.
Course goal:	The course is conceived as theoretical - practical. It is the basis for following physiotherapy subjects. The aim is to manage stated physical activities and to develop the skills in order to apply them in physiotherapy included graphic presentation of movement and terminology.
Content:	**Lecture topics:** 1. Importance, content and forms of physical education in physiotherapy. 2. Terminology and graphic presentation of movement. 3. Importance and way of stretching the most often shortened muscle groups. 4. Importance and way of strengthening the most often weakened muscle groups. 5. Correct and incorrect posture, the proportion of muscle groups. 6. Construction of a training unit. 7. Development and diagnosis of power abilities. 8. Development and diagnosis of speed abilities. 9. Development and diagnosis of coordination abilities 10.Development and diagnosis of mobility abilities 11.Revision **Seminar Topics:** 1. The principles of stretching muscle groups. 2. Stretching. 3. Stretching exercises. 4. The principles of stretching. 5. Callanetics. 6. Back muscles strengthening exercises. 7. Abdominal strengthening exercises. 8. Arrangement of a training unit. 9. Presentation of a training unit. 10. Presentation of a training unit.

Faculty:	**Faculty of Health Studies**
Course title:	***Psychology***
Course code:	KF/ PSYF9
Level of course:	bachelor
ECTS:	3
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	1/1
Requirements on student:	progress test, oral exam
Course goal:	The subject includes the areas of psychological scientific disciplines: general psychology, personality psychology, developmental psychology; it develops the student's knowledge regarding health psychology and social psychology. Special emphasis is put on mental health of women and children including prevention of negative states in the society.
Content:	**Lecture Topics:** 1. Socialization of an individual. 2. Mechanism of socialization. 3. Agents of socialization. 4. Socio-pathological phenomena in the society. 5. Prevention of socio-pathological phenomena. 6. Social group, delimitation, classification. 7. Structure and dynamics of a group. 8. Social role and position, professional deformation and its prevention. 9. Family and its development. 10. Pathology of the family. 11. Dependency issues. **Seminar Topics:** 1.Social development of an individual. 2. Problems connected with mechanisms of socialization. 3. Relationships between agents of socialization. 4. Socio-pathological phenomena in the society. 5. Prevention of socio-pathological phenomena. 6. Management of social groups. 7. Goals, values, standards. 8. Social role and position, the process of identifying them. 9. Predictable and unpredictable crises. 10. Pathology of the family. 11. Transactional analysis.

Faculty:	**Faculty of Health Studies**
Course title:	***Physical Therapy I***
Course code:	KF/ FT19
Level of course:	bachelor
ECTS:	3
Teacher:	Mgr. Ondřej Kališko
Term:	winter
Language of instruction:	English
Lectures/exercises:	1/2
Requirements on student:	Credit: 80% active participation in seminars, demonstration of acquired practical skills - basic massage touches, performing individual sets of classical massage, passing practical training in balneotherapy of a spa facility (Lázně Teplice a.s.), passing a credit test.
Course goal:	The course is designed as theoretical - practical, it is the subject of profiling base of the study program. It enables students to acquire professional theoretical knowledge and practical skills in the field of physical therapy with a focus on the use of traditional and modern physical means. Learning outcomes of the course unit The aim of the course is to acquire professional knowledge, professional skills and general abilities in the field of principles and therapeutic procedures in the implementation of the physical therapy program, acquiring knowledge of the physical mechanism of each procedure, including adherence to safety and health at work.
Content:	**Lecture topics:** 1.Introduction to the study, basic division, aspects of modern physical therapy. 2. Effects of physical stimuli, general principles of choice of physical therapy. 3.Therapy. 4.Hydrotherapy. 5.Application of local heat, cryotherapy. 6.Inhalation. 7. Classic massage. 8.Mechanotherapy. 9.Therapy of lymphedema. 10.Indications and contraindications of physical therapy. **Exercise topics:** 1.Basic touches of classical massage. 2. Classic massage - set for DK from behind, from front. 3. Classic massage - set for HK. 4. Classic massage - set for neck and head. 5. Classic massage - set for chest, abdomen. 6.Thermotherapy. 7.Hydrotherapy. 8.Mechanotherapy. 9.Use of hydrotherapy in balneotherapy of spa facilities. 10.Use of thermotherapy in balneotherapy of spa facilities.

Faculty:	**Faculty of Health Studies**
Course title:	***Kinesiology methods***
Course code:	KF/ MK29
Level of course:	bachelor
ECTS:	5
Teacher:	Mgr. Ondřej Kališko
Term:	winter
Language of instruction:	English
Lectures/exercises:	2/3
Requirements on student:	Active participation in lessons Demonstration of practical skills Written test, another term of oral examination.
Course goal:	Learning outcomes of the course unit The course is a follow-up to information acquired in the disciplines of physiotherapy and provides knowledge of modern methods of movement therapy. In the form of theoretical - practical students will acquire these methods and use them in professional practice.
Content:	**Lecture topics:** 1. McKenzie method 2.Bobath's concept in children and adults 3. Reflex Locomotion Method Vojty (positional reactions) 4. Developmental kinesiology according to Kolář 5.Dynamic neuromuscular stabilization 6.Basal programs and subroutines according to Jarmila Čápová **Seminar topics:** 1.Basal programs and subroutines according to Jarmila Čápová 2.Dynamic neuromuscular stabilization 3. Examination and mobilization of ribs, spine according to Lewit

Summer Term

Faculty:	**Faculty of Health Studies**
Course title:	***English language I***
Course code:	KF/AJF19
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Pavel Prchal
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/2
Requirements on student:	Active participation in classes, written test.
Course goal:	The subject includes teaching English for intermediate students focused on professional language regarding health care area. The aim is reading and understanding foreign professional texts and communication with patients.
Content:	**Seminar Topics:** 1. The human body and its systems. 2. Positional and directional terms, body systems 3. The musculoskeletal system. 4. Medical professions 5. Examination questions. 6. Diseases and disorders. 7. The hospital and wards. 8. At the doctor's. 9. Orthopaedics. 10. Revision.

Faculty:	**Faculty of Health Studies**
Course title:	***German language I***
Course code:	KF/NJF19
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Vratislava Postlová
Term:	summer
Language of instruction:	German
Lectures/exercises:	0/2
Requirements on student:	Active 80% seminar attendance, passing a written test with 80% passing level
Course goal:	The subject includes language teaching for intermediate students with the focus on professional language in health care system. The aim is reading and comprehension of foreign special texts, developing the ability to summarise and to reproduce the main ideas, and especially the ability to communicate with a patient or with other professionals of similar occupation.
Content:	Seminar topics: 1. Der menschliche Kőrper - Gesamtbeschreibung. 2. Die Knochen und Gelenke I. 3. Die Knochen und Gelenke II. 4. Knochenbrűche und Erkrankungen. 5. Die Muskeln. 6. Kreislaufsystem. 7. Nervensystem. 8. Allgemeine Krankenarbeit I. 9. Allgemeine Krankenarbeit II. 10. Wiederholung..

Faculty:	**Faculty of Health Studies**
Course title:	***Summer Cycling Course***
Course code:	KE/LTVF9
Level of course:	bachelor
ECTS:	1
Teacher:	PhDr. Alena Charvátová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	5 days
Requirements on student:	Active course participation. Active participation in cycling training for people with disability.
Course goal:	The content of the course is to familiarize the students both practically and theoretically with the basics of hiking and cycling by means of the course organized in nature.
Content:	Content specialization: Didactics and assistance of hand bike ride. Didactics of sports in nature of visually impaired people. Didactics of sports in nature of people with hearing impairments. Accompanying/additional activities.

Faculty:	**Faculty of Health Studies**
Course title:	***Biomechanics***
Course code:	KF / BM9
Level of course:	bachelor
ECTS:	1
Teacher:	PhDr. Alena Charvátová, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	10/0
Requirements on student:	Credit: a written test
Course goal:	The course introduces students to the field of biomechanics. Emphasis is placed on physical fundamentals of biomechanics, understanding kinematics and dynamics of movement of the whole body and its individual parts. Attention is also paid to aspects of mechanical properties of bodies (stiffness, elasticity) and fundamentals of fluid mechanics with respect to the vascular system.
Content:	Lecture topics: 1. Introduction to biomechanics. 2. Measurement and expression of movement. 3. Basics of kinematic description (mass point, rigid body and system of bodies, human motion). 4. Fundamentals of dynamic description of movement (force and moment of force, conditions of equilibrium, center of gravity, geometry of masses of human body, levers in human movement apparatus). 5. Fundamentals of dynamic description of motion (Newton's laws, momentum and moment, kinematic pairs and strings, energy aspects of motion, friction and resistance of environment, motion in non-inertial system, inertial forces and their use in medicine). 6. Mechanics of flexible bodies, elasticity (Hook's law). 7. Architecture and mechanical properties of bones (Wolf's law, principle of maximum strength at minimum material) and muscles. 8. Force and velocity characteristics (Hill equation), structure and mechanical behavior of cartilage. 9. Fluid mechanics (pressure and pressure force, Pascal's law, continuity equation, Bernoulliv equation, viscosity). 10. Blood flow properties and biomechanics of cardiovascular system and cardiac muscle (Laws of Laplace and Starling Law).

Faculty:	**Faculty of Health Studies**
Course title:	***Information Systems***
Course code:	KF / ISF9
Level of course:	bachelor
ECTS:	1
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/10
Requirements on student:	Credit: 80% active participation in seminars, active work - checking the elaboration of continuously assigned tasks using the e-learning environment Moodle.
Course goal:	The course fulfills two main objectives. The first is to ensure that after graduation students are able to technically handle all the tasks associated with the preparation of the bachelor thesis. The second goal is to acquaint students with the possibilities of using information systems (IS) in health care.
Content:	Seminar topics: 1. E-learning: Functions and types of e-learning system, access to e-learning (Moodle, MEFANET). 2. Keyboard shortcuts (use Ctrl + H for replacements). PowerPoint (slide transitions, use of animations). 3. Word: Dividing a document into sections and different types of page numbering in sections. 4. Word: Titles and content generation, citations and literature review. 5. Excel: Automatic sequences, absolute / relative reference, partition anchoring, multi-criteria data sorting. 6. Excel: Function = sum, selected text and logic functions. Graphs and their adjustments. 7. General principles and trends of E-health, principles and examples of use of telemedicine. 8. EHR (EPR) - electronic health (patient) record, its standards. 9. IS in health care and in hospitals (functions, demonstrations). 10. IS - image information (acquisition, storage, processing).

Faculty:	**Faculty of Health Studies**
Course title:	***Orthopedics And Protethics***
Course code:	KF / ORTF9
Level of course:	bachelor
ECTS:	3
Teacher:	MUDr. Karel Edelmann, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	18/0
Requirements on student:	Credit: active participation in the study, internship according to the possibility of orthopedic or traumatological outpatient department, operating room, successful completion of written test - 70%, exam: oral.
Course goal:	Comprehensive overview of diagnostics and treatment of diseases and disorders of the locomotive apparatus with emphasis on prevention and in relation to physiotherapy. Comprehensive overview of spondylosurgical problems of degenerative and traumatic. An overview of the basics of prosthetic issues and the use of prosthetic devices in connection with rehabilitation and return of patients to society.
Content:	Lecture topics: 1. Systemic skeletal diseases, birth defects. 2. Inflammation of joints and bones, tumors, avascular necrosis 3. Osteoarthritis, joint replacements. 4. Soft knee injuries and diseases, arthroscopy. 5. Spondylosurgery, defective posture, scoliosis, Scheurmann's disease. 6. Degenerative diseases of the spine, injuries of the spine. 7. Static defects of limbs. 8. Amputation and prosthesis of upper and lower limbs. 9. Orthotics, calceotics, adiuvatics.

Faculty:	**Faculty of Health Studies**
Course title:	***Research Methods In Physiotherapy***
Course code:	KF / VMF9
Level of course:	bachelor
ECTS:	1
Teacher:	MUDr. Karel Edelmann, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/9
Requirements on student:	Credit: demonstration of practical skills (research activity in electronic databases, work with Excel).
Course goal:	The subject follows the subject Methods of scientific work with the principles of publishing and continues with selected possibilities of statistical analysis. The aim of the course is to provide students with practical instructions how to proceed with the bachelor thesis.
Content:	Seminar Topics: 1. Principles of publishing: Search, ISBN and ISSN, review process, impact factor. 2. Ethics of Publishing: Copyright Law, Citation Standards. 3. Working with e-catalog of UJEP library, with MEDVIK database and e-catalog of Krajské zdravotní, a.s. 4. Basics of working with databases Web of Science, SCOPUS, NursingOvid. 5. Introduction to data analysis: Gauss curve, population parameters, statistical hypotheses, significance level. 6. Selected samples of statistical tests: Paired t-test (Excel - TTEST command). 7. Selected examples of statistical tests: Two-sample t-test (Excel - TTEST command). 8. Selected statistical samples: chi-square type tests (Excel - CHITEST command). 9. Basics of linear regression and correlation: Model of regression line (Excel - INTERCEPT commands, SLOPE).

Faculty:	**Faculty of Health Studies**
Course title:	***Clinical psychology***
Course code:	KF/ KPSF9
Level of course:	bachelor
ECTS:	1
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/exercises:	1/1
Requirements on student:	Student gains credit for at least 80% of active attendance in seminars and demonstration of orientation in the field in writing.
Course goal:	Learning outcomes of the course unit The subject deepens the knowledge about mental life of man in bio-psycho-social context. The aim is to gain knowledge about mental and personality disorders. It also focuses on the professional behavior of nursing staff .
Content:	**Lecture topics:** 1. Changes and disorders of perception. 2. Attention and consciousness disorders. 3. Emotional, affective, emotional disorders. 4. Emotional, affective, emotional disorders. 5.Disorders of instincts, instincts, behavior. 6.Disorders of instincts, instincts, behavior. 7. Disorders of thinking, speech. 8. Sleep disorders. 9. Memory disorders **Seminar topics:** 1. Personality and behavior disorders. 2. Personality and behavior disorders. 3.Neurotic disorders. 4.Neurotic disorders. 5. Behavior disorders. 6.Psychotic disorders. 7. Eating disorders. 8. Working with handicapped individual. 9. Working with handicapped individual.

Faculty:	**Faculty of Health Studies**
Course title:	***Physical Therapy II***
Course code:	KF/ FT29
Level of course:	bachelor
ECTS:	3
Teacher:	Mgr. Ondřej Kališko
Term:	summer
Language of instruction:	English
Lectures/exercises:	1/2
Requirements on student:	Credit: 80% attendance at the practical part of the course, credit on the basis of the practical examination of reflexology massages. Oral examination: three questions theoretical and practical design of the procedure based on a specific prescription - a voucher issued by a doctor.
Course goal:	The course is designed as theoretical-practical. It enables students to acquire theoretical knowledge and practical skills in the field of physical therapy, focusing on the use of traditional and modern physical therapy procedures.
Content:	**Lecture topics:** 1. Basic principles and expectations of physical therapy, general indications and contraindications. 2. Individual methods and procedures of physical therapy applied by a physiotherapist always in the structure: principle, effects of setting the parameters of the procedure and their influence on the effect, indications, contraindications, practical application. 3. Electrotherapy - low frequency currents - galvanotherapy. 4. Electrotherapy - low frequency currents - classical currents. 5. Electrotherapy - medium frequency currents. 6. Electrotherapy - high frequency currents (diathermy + DET). 7. Magnetotherapy. 8. Electrodiagnostics. 9. Electrostimulation and electrogymnastics. 10. Principles of safe application and prescription of physical therapy, correct interpretation of the prescription of physical therapy in order to set the right therapeutic parameters towards the goal of treatment. **Exercise topics** 1. Reflexology massage - back set. 2. Reflexology massage - neck and head set. 3. Reflexology massage - chest and pelvic assembly. 4. Ball facilitation according to Jebava. 5. Examination and treatment of soft tissues. 6. Introduction to the control of physical therapy devices (electrotherapy). 7. Setting the right parameters on physical therapy devices (electrotherapy). 8. Practical application of physical therapy (electrotherapy - low frequency currents). 9. Practical application of physical therapy (electrotherapy - medium frequency currents). 10. Practical application of physical therapy (electrotherapy - electrogymnastics and electrostimulation).

MEDICAL RESCUE

WINTER TERM

Faculty:	**Faculty of Health Studies**
Course title:	***Anatomy***
Course code:	KZR/ANZ2
Level of course:	bachelor
ECTS:	5
Teacher:	MUDr. PhDr. Marcel Nesvadba, PhD.
Term:	winter
Language of instruction:	English
Lectures/exercises:	1/1
Requirements on student:	Active participation in seminars – min. 80% Continuous verification of knowledge during the academic year (test). Oral examination
Course goal:	The course is conceived as theoretically – practical and contains an overview of systematic human anatomy, namely topographic, microscopic, functional, developmental and applied. The aim is to provide knowledge about the interconnectedness of individual systems of the human body in its integrity and the resulting functionality.
Content:	**Lecture topics:** 1. Introduction to the subject. Basic anatomical orientation on the human body, anatomical nomenclature. Basic overview of tissues. 2. Anatomy of the passive locomotor system I (axial skeleton, skull). 3. Anatomy of the passive locomotor system II (skeleton of the limbs). 4. Anatomy of the active locomotor system I (structure and classification of muscles, head and neck muscles). 5. Anatomy of the active locomotor system II (torso and limb muscles). 6. Cardiovascular system I (heart structure, blood circulation). 7. Cardiovascular system II (structure and classification of blood vessels, blood; lymphatic system). 8. Respiratory system (nasal cavity, paranasal sinuses, nasopharynx, larynx, lungs, pleura, mediastinum). 9. Digestive system (oral cavity, pharynx, esophagus, intestinal stomach, relevant glands). 10. Genitourinary system I (kidneys, ureters, bladder, urethra). 11. Genitourinary system II (male and female genitalia). Endocrine glands. 12. Nervous system I (peripheral nervous system). 13. Nervous system I (central nervous system). 14. Sensory systems. Skin system. **Seminar topics:** 1. Tissues (classification, structure, function). 2. Passive locomotor system I (bone classification, skeleton). 3. Passive locomotor system II (joint structure, division, movements). 4. Active locomotor system I (classification, structure and function of muscles). 5. Active locomotor system II (overview of the main skeletal muscles). 6. Cardiovascular system I (heart structure, conduction system, ECG curve). 7. Cardiovascular system II (classification and structure of blood vessels,

	vascular bed, blood circulation, lymphatic system). 8. Respiratory system (cavities, vocal cord, bronchial tree, respiratory volumes). 9.Digestive system (tooth, glands belonging to the digestive system, enterohepatic circulation). 10. Genitourinary system I (nephron, urinary tract - structure and function). 11. Urogenital system II (male and female genitals, ovarian and menstrual cycle, relationship to the endocrine system). 12. Nervous system I (division of the nervous system, spinal and cranial nerves, sympathetic and parasympathetic). 13. Nervous system II (CNS, anatomy of the brain and spinal cord). 14. Sensory skin systems. Anatomy of eye and ear.

Faculty:	**Faculty of Health Studies**
Course title:	***Biochemistry, hematology and transfusion medicine***
Course code:	KZR/BHZ2
Level of course:	bachelor
ECTS:	2
Teacher:	RNDr. Ing. Mgr. Petr Kelbich, Ph.D., Ing. Pavla Bradáčová, MUDr. Jan Špička, MBA
Term:	winter
Language of instruction:	English
Lectures/exercises:	1/1
Requirements on student:	Active participation in seminars – min. 80% Credit test
Course goal:	The course consists of topics dealing with biochemistry, hematology and transfusion medicine. The field of biochemistry is conceived as a theoretical unit which will provide students with basic knowledge of general and medical biochemistry for the needs of related subjects. It provides information about the biochemical balance of the internal environment of the organism, biochemical changes in the organism during the disease. It includes knowledge about laboratory tests in metabolically important groups of diseases including methods and techniques of individual collection of biological material. The field of hematology and transfusion medicine is conceived as a theoretical-practical unit which provides students with basic knowledge in the field of clinical hematology, informs about basic and special examination methods in hematology. It includes knowledge about the methods of blood collection for hematological examinations. It clarifies the basic principles of transfusion medicine, introduces the laboratory methods used in transfusion medicine, transfusion products, indications for their application and principles of administration, including post-transfusion complications.
Content:	**Lecture topics:** 1. Importance of biochemistry in medical fields (definition of biochemical fields - pathobiochemistry, clinical biochemistry, xenobiochemistry). 2. Cell biochemistry (cell organelles, cell membrane - membrane transport). 3. Composition of a living organism (biogenic elements - macrobiogenic, microbiogenic). 4. Basic organic compounds of living matter - nucleic acids, proteins, carbohydrates, lipids). 5. Regulation of metabolism, endocrine system. 6. Enzymatology. 7. Hemopoiesis, leukocytes, erythrocytes, platelets, distribution, morphology, function. 8. Anemia, basic division, causes, manifestations, laboratory findings. 9. Leukemia, MDS, myeloproliferation, basic division, causes, manifestations. 10. Lymphoproliferation, basic division, causes, manifestations. 11. Primary hemostasis, coagulation factors, fibrinolysis, blood clotting inhibitors. 12. Disorders of hemostasis, thrombocytopathy, hemophilia, thrombophilia, vWCH, HIT, TTP, DIC. 13. Collection of blood donors and its components. 14. Transfusion preparations. **Seminar topics:** 1. Repetition - chemical calculations, cell, organelles, organic chemistry. 2. Membrane transport. Expression of solution concentrations. 3. Energy - calculations. 4. Water and minerals (water distribution, main ions, water losses).

	5. Acid-base balance. 6. Differences in metabolism between organisms and their importance. 7. Reference values. 8. Examination of blood count, individual parameters, methods of blood collection. 9. Differential budget of leukocytes, pathological changes of erythrocytes, leukocytes, platelets. 10. Bone marrow collection and examination, morphological evaluation, pathological changes. 11. Basic coagulation examination, aggregation, Multiplate, PFA200, influence of preanalytical phase. 12. Special coagulation examination for coagulopathies, thrombophilia, vWCH, HIT, TTP, DIC. 13. Organization of transfusion service. 14. Crisis blood policy.

Faculty:	**Faculty of Health Studies**
Course title:	***Microbiology, epidemiology and hygiene***
Course code:	KZR/MEZ2
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Miroslava Zemanová, Ph.D.
Term:	winter
Language of instruction:	English
Lectures/exercises:	1/0
Requirements on student:	Credit test (in the form of a written test)
Course goal:	The course is conceived as a theoretical. Students will get acquainted with the basics of medical microbiology - virology, bacteriology, mycology, parasitology, immunology and epidemiology of infections in relation to infectious diseases, the origin and spread of infectious diseases, their laboratory diagnostics and treatment options including anti-epidemic measures. Furthermore, students will gain the information about the principles of health and safety at work in medical workplaces especially when performing work with biological risk. Students will master the characteristics and principles of prevention of infections associated with health care, hand hygiene and the basics of disinfection and sterilization.
Content:	**Lecture topics:** 1. Microbiology - definition of the field, classification of microorganisms, division of microorganisms. 2. Microorganisms and the human organism. 3. Bacteriology - classification of bacteria, structure of bacteria, physiology of bacteria, growth and multiplication of bacteria. 4. Pathogenicity and virulence of bacteria, bacterial toxins. 5. Special bacteriology - selected parts. 6. Antimicrobial substances, resistance to antimicrobial substances. 7. Properties and classification of viruses, interactions of viruses and cells, mechanisms of viral infections, treatment of viral infections. 8. Mycology, parasitology 9. Basics of immunology - definition of the field, immune system, immunity, laboratory diagnostics. 10. Clinical immunology, immunization, vaccination calendar. 11. Basics of infectious epidemiology. Anti-epidemic measures, hand hygiene, disinfection and sterilization; Principles of health protection of health care workers in the provision of health care. 12. Infections associated with health care, their prevention and reporting. 13. Basics of hygiene. Hygienic requirements for medical facilities. 14. Nutritional hygiene and food safety. 15. Principles of health and safety at work in medical workplaces. 6. Immunology - definition of the field, immune system, immunity, laboratory diagnostics. Clinical immunology, immunization, vaccination schedule, healthcare associated infections, their prevention and reporting. 7. Epidemiology of infections, anti-epidemic measures, hand hygiene, disinfection and sterilization; Principles of health protection of health care workers in the provision of health care.

Faculty:	**Faculty of Health Studies**
Course title:	***Public health and health education***
Course code:	KZR/VZZ2
Level of course:	bachelor
ECTS:	2
Teacher:	**PhDr. Oľga Jarabicová, PhD.**
Term:	winter
Language of instruction:	English
Lectures/exercises:	1/1
Requirements on student:	Active participation in seminars Test (min. 75 % success) Elaboration of seminar work - intervention program focused on protection and support of health of selected population groups
Course goal:	The course is conceived as a theoretical. The course will provide knowledge of the basics of public health which deals with disease prevention, strengthening and prolonging life through organized efforts of society with the main goal of achieving the highest possible level of health of the population. Based on the integration of knowledge of biomedical and social sciences, it will provide information about the organization, structure, functions and management of individual components of health care. Part of the course is the system of health care financing in the Czech Republic.
Content:	**Lecture topics:** 1. Public health care - definition, focus, content, history of public health, basic features, application, methodological tools, main functions, implementation in practice - public health authorities. 2. Health and its overall concept - definitions, health models, determinants of health, risk factors, inequality and equality in health, legislation. 3. Prevention - definition, division, application in practice. 4. Health care system - health care systems + health care financing in the Czech Republic. 5. National Health Information System - registries, IHIS, data collection (screening + epidemiological method). 6. Evaluation of the health status of the population - naming the main health indicators, health status of the population of the Czech Republic 7. Health education - definition and content of the field, goals, methods and forms of work, international documents related to health protection and promotion, Health 21, Health 2020, Health 2030 + programs applied in the Czech Republic. **Seminar topics:** 1. Preparation of the intervention program - project elaboration, formal side and implementation + examples from practice. 2. Questionnaire - principles for elaboration + examples from practice. 3. Nutrition and health. 4. Health risk assessment for employees - determining their ability to perform work. 5. Risks associated with the performance of the medical profession. 6. Basics of epidemiology - definition, epidemiology of chronic diseases.

Faculty:	**Faculty of Health Studies**
Course title:	***Professional experience II***
Course code:	KZR/O2Z2
Level of course:	bachelor
ECTS:	6
Teacher:	Mgr. Alena Kohlová
Term:	winter
Language of instruction:	English
Lectures/exercises:	160 hours
Requirements on student:	**Form of verification of study results:** Written confirmation of the completed range of hours of professional practice by a mentor in the Record of Professional Practice Continuous verification of knowledge during the academic year (test) **Requirements:** Proof of the performance of the required services according to the Record of Professional Practice 100% attendance (possible absence from professional practice must be completed in an alternative period according to the agreement with the guarantor of the internship and mentor of the relevant workplace)
Course goal:	The aim of the course, following on from previous professional practice is to acquire other practical skills, especially in the provision of basic and specialized nursing care within the competencies of the paramedic. During the internship the student learns under professional mentoring (contracted treatment) to work through the nursing process, assesses the state of saturation needs, self-sufficiency, disease manifestations, patient risk factors, even using measurement techniques used in nursing practice. The student also acquires the knowledge needed to take the patient's medical history, analyzes the data obtained and learns to use them correctly for the patient's benefit. The student also cooperates with other members of the medical team in providing health care and ensuring the operation of the department.
Content:	**Focus of professional practice:** 1. Familiarization with the organization of the ICU, nursing services associated with the admission of the patient to the ICU. 2. Collection and orientation evaluation of biological material in intensive care. 3. Monitoring of physiological functions in intensive care, monitoring of CNS, respiratory system, cardiovascular system, gastrointestinal tract functions, including assessment of oxygen saturation and basic heart rhythm disorders, and other body parameters using medical devices. Use of scoring systems in intensive care. 4. Introduction and maintenance of inhalation and oxygen therapy, respiratory care. 5. Provision and care of invasive inputs in intensive care (blood circulation, GIT, urinary system, epidural space). 6. Ensuring nutrition in intensive care (finding out the nutritional status, enteral, parenteral nutrition). 7. Infusion therapy and assistance in transfusion therapy. 8. Specifics of drug application in intensive care. 9. Wound care in intensive care. 10. Perioperative care in intensive care, drainage care, use of ostomy appliances and drainage systems in patients with long-term drainage. Nursing care for patients undergoing puncture. 11. Treatment of pain in intensive care.

Faculty:	**Faculty of Health Studies**
Course title:	***Emergency medicine I***
Course code:	KZR/U1Z2
Level of course:	bachelor
ECTS:	4
Teacher:	PhDr. Mgr. et Mgr. Patrik Christian Cmorej, PhD., MHA, MUDr. Ilja Deyl, MUDr. Xaya Waicová
Term:	winter
Language of instruction:	English
Lectures/exercises:	1/1
Requirements on student:	Active participation in seminars – min. 80% Written test Oral examination Practical examination
Course goal:	The course is conceived as a theoretical and practical complex. It includes comprehensive issues of diagnostics, therapy of acute and critical conditions, includes securing the patient in PNP, his transport and subsequent urgent care within the medical facility, including emergency admission. Students will get acquainted with the principles of air rescue services. An integral part is the issue of war medicine with all aspects of threat including radiation, chemical and biological specifics of injuries – gunshot, devastating injuries etc. Information is also provided in the field of forensic medicine. The aim is to prepare a paramedic for the theoretical and practical management of the provision of specific nursing care in the area of pre-hospital emergency care.
Content:	**Lecture topics:** 1. History of the origin of the field, development of emergency medicine. Rescue as a field, system of rescue services. Other rescue services (Water IB, Mountain IB, Mining IB, voluntary organizations). Activities of a paramedic, equipment for PNP. 2. Definition of critical, urgent and health limited patient, rescue chain. First contact with the patient, witnesses of the event, collection of information. Basic physical examination, examination of the ABCD principle. Basic vital functions and monitoring in emergency medicine. 3. Cardiopulmonary resuscitation, basic and advanced. Post-resuscitation care. 4. PNP in a patient with respiratory system disorders: respiratory failure due to pulmonary causes, airway management, artificial lung ventilation. Non-invasive pulmonary ventilation. 5. PNP in a patient with respiratory system disorders: acute respiratory failure, aspiration, bleeding into DC, bronchial asthma, inflammatory diseases of DC, ARDS. 6. PNP in a patient with respiratory system disorders: pulmonary edema, pulmonary embolization, drowning, pneumothorax. 7. PNP in a patient with cardiovascular system disorders: chronic and acute coronary heart disease, arrhythmias, hemopericardium. 8. PNP in a patient with cardiovascular disease: collapse, hypertension, aneurysm and arterial dissection. 9. PNP in a patient with a disorder of the cardiovascular system: ICHDK, TEN, coagulation disorders. 10. Shock states, differential diagnostics. **Seminar topics:** 1. Acute examination in PNP evaluation of the situation and basics of ABCDE. Taking anamnesis, physical examination, providing information to doctors, competence in providing information, medical documentation in PNP. 2. Cardiopulmonary resuscitation training. Ensuring airway patency in the

	field. 3. Invasive and non-invasive inputs in PNP. 4. ECG and monitoring in PNP. 5. Acute conditions in pneumology - differential diagnosis. 6. Acute conditions in cardiology - differential diagnosis.

MEDICAL RESCUE
Summer Term

Faculty:	**Faculty of Health Studies**
Course title:	***Integrated rescue system***
Course code:	KZR/IZZ2
Level of course:	bachelor
ECTS:	2
Teacher:	PhDr. Mgr. et Mgr. Patrik Christian Cmorej, PhD., MHA, Mgr. Jan Trpišovský
Term:	summer
Language of instruction:	English
Seminars/exercises:	1/1
Requirements on student:	80% participation in seminars Credit in the form of a written test, oral exam
Course goal:	The course is conceived as a theoretical and practical. Students will get acquainted with the issues of IRS and the specifics of cooperation in crisis management. It acquaints all components of the IRS, its staff, their education system, basic activities, cooperation with non-medical emergency services of other institutions that may be involved in dealing with emergencies and crisis situations (KS), especially the activities of the mountain service and water rescue service and others. components of the integrated rescue system. Provides information on emergencies, the role of disaster medicine and mass disasters. Legal aspects concerning the rescue system and critical emergency medicine are also taken into account.
Content:	**Seminar topics:** 1. Introduction to the subject, legal regulations, IRS in crisis management and crisis situations. 2. Structure and function of IRS, Central IRS alarm plan and type activities of IRS units. 3. Organization and activity of the Fire and Rescue Service of the Czech Republic within the IRS, rescue and liquidation work, the function of the intervention commander. 4. Organization and activities of the IRS within the IRS, the activities of the IRS in extraordinary events and the organization of the place of intervention during the joint intervention of the IRS units. 5. Organization and activities of the Police and other IRS units. 6. Tactical, operational and strategic management of IRS units in a joint intervention. 7. Activities of central and territorial administrative authorities and their bodies, legal and entrepreneurial natural persons in the field of crisis management. 8. Measures to protect the population in case of emergencies. 9. Principles of population behavior in emergencies, individual protection. 10. Tactical and verification exercises. **Exercise topics:** 1. Organization and activities of operational centers of individual IRS units, including simulated training of their function in dealing with emergencies. 2. Excursion to the medical operating center. 3. Demonstration of material equipment for HPZ ZZS solution. 4.Traumatological plan of the region. 5. Simulation and training of emergency management by IRS units. 6. Simulation and training in dealing with emergencies with a focus on emergency medical services and its activities in the context of mass disability.

	7. Practical training in the use of personal protective equipment in dealing with emergencies with a focus on the function and activities of biohazard emergency medical teams. 8. Model situation of rescue work on a patient with suspected VNN. 9. Model situation of rescue work in a traffic accident with a larger number of injured persons.

Faculty:	**Faculty of Health Studies**
Course title:	***Professional experience I***
Course code:	KZR/O1Z2
Level of course:	bachelor
ECTS:	6
Teacher:	Mgr. Alena Kohlová
Term:	summer
Language of instruction:	English
Lectures/exercises:	160 hours
Requirements on student:	**Form of verification of study results:** Written confirmation of the completed number of hours of professional practice by a mentor in the Record of Professional Practice **Requirements:** Proof of performance of the required services according to the Record of Professional Practice 100% attendance (possible absence from professional practice must be completed in an alternative period according to the agreement with the guarantor of the internship and mentor of the relevant workplace)
Course goal:	The aim of the course is to build on the knowledge and experience of previous nursing-oriented subjects and use them in the conditions of clinical practice. During the course, the student, under professional mentoring (contractually provided) gradually acquires the correct procedures of basic nursing care according to valid nursing standards and adapts to work in the chosen field. They learn to work through the nursing process. Part of the practice is training in communication with both patients and other members of the medical team, care for the mental well-being of patients, training in education and ensuring patient compliance.
Content:	**Focus of professional experience:** 1. Familiarization with the organization of the department, prevention of nosocomial diseases. Care of the patient's environment in the ward, care of the bed, ensuring rest, sleep, positioning the patients. 2. Collection of nursing anamnesis, assessment, use of measuring scales. 3. Performing hygienic care. Ensuring preventive procedures of the immobilization syndrome. 4. Monitoring of physiological functions (TT, TK, D, SpO2, control of the state of consciousness). 5. ECG curve recording, basic parameters for its evaluation. 6. Preparation of the patient for the examination. 7. Care of a patient with pain. 8. Collection of biological material: urine, stool, sputum, gastric and duodenal contents, swabs, swabs, collection of capillary and venous blood. 9. Ensuring the emptying of urine. Catheterization of a woman's bladder. 10. Ensuring emptying stool. Enema applications. 11. Care of stoma performed in the intestine. 12. Acceptance and control of medicinal products, handling. 13. Administration of drugs orally, in cavities, mucous membranes, skin, respiratory tract, principles of administration of opioid analgesics. 14. Application of intradermal, subcutaneous injections, intramuscular injections. 15. Intravenous drug administration. Infusion therapy. 16. Assistance in transfusion therapy. 17. Oxygen therapy. 18. Nutrition - parenteral and enteral. By person. Serving food. 19. Treatment of acute wounds, assistance with bandages. Prevention and treatment of chronic wounds.

	20. Provision of peripheral venous access. Intravenous drug administration. Infusion therapy. 21. Care of drains and drainage systems, selected types of stoma, including sampling of biological material. 22. Perioperative care.

Faculty:	**Faculty of Health Studies**
Course title:	***Transcultural nursing***
Course code:	KZR/TRZ2
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Alena Kohlová
Term:	summer
Language of instruction:	English
Exercises/seminars:	1/1
Requirements on student:	Attendance at seminars (min. 80%) Seminar work Written credit test
Course goal:	The course is conceived as a theoretical and practical. It deals with selected terminology, multicultural diagnostics, basic characteristics and culture of minority groups. It emphasizes the cross-cultural approach of the healthcare professional in caring for patients with different socio-cultural needs and priorities. The course also includes information from the legislative field. The goal is to understand the differences in patient values and beliefs.
Content:	**Seminar topics:** 1. Basic conceptual apparatus used in connection with multicultural issues. 2. Multiculturalism, transculturalism. 3. Estnocentrism. Culture shock. 4. National composition of the population of the Czech Republic, development. 5. Attitude of the majority of the Czech Republic to cultural diversity. **Exercise topics:** 1. Systems of health and medical care for foreigners in the Czech Republic, abroad. Conditions for providing health care in the Czech Republic. Ethical aspects of providing culturally friendly care. 2. Methods of research in a transcultural environment. Leininger theory of culturally identical care. Camphiny-Bacote model. 3. Communication, language and cultural barriers in a multicultural environment. Cultural competence of a healthcare professional. 4. Characteristics of selected ethnic groups living in the Czech Republic. 5. Characteristics of selected ethnic groups living in the Czech Republic.

Faculty:	**Faculty of Health Studies**
Course title:	***Medical psychology***
Course code:	KZR/ZPZ2
Level of course:	bachelor
ECTS:	2
Teacher:	PhDr. Otakar Fleischmann, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/seminars:	1/2
Requirements on student:	Credit can be obtained for at least 80% active participation in seminars and for mastering the requirements (written). Oral examination
Course goal:	The course is conceived as a theoretical and practical unit and builds on knowledge from general psychology. It focuses in detail on knowledge related to health psychology, clinical psychology, the application of psychological knowledge in health care, which aims to better understand the behaviour of a sick individual, to understand his needs and the problems that the disease brings to him and his family. It addresses the issue of psychology of sick individuals of all ages in connection with the provision of health care. Stress management affects the management of mental stress and stress in connection with the performance of the profession. The aim of the course is to inform about significant psychological problems related to the change of health status and to prepare students for specific behaviour and reactions of patients / clients in difficult situations.
Content:	**Lecture topics:** 1. Psychological problems of the disease. 2. Psychosomatic and somatopsychic relationships. 3. Autoplastic picture of the disease. 4. Experiencing the disease over time, the ratio of patient to disease. 5. Categories of patients / clients from a psychological point of view. 6. Psychological problems of iatropathogenesis. 7. Psychology of pain. 8. Requirements for a paramedic in a patient / client paramedic relationship. 9. Dying and death in terms of psychology. **Seminar topics:** 1. Principles of professional behavior. 2. Productive behavior of a paramedic. 3. Unproductive behavior of a paramedic. 4. Types of paramedics. 5. Non-adaptive character manifestations of a paramedic. 6. Patient response to illness, injury. 7. Impact of iatropatogenesis on the patient / client. 8. Anxiety, fear and inferiority in the work of a paramedic. 9. Communicating annoying messages.

Faculty:	**Faculty of Health Studies**
Course title:	***Professional course II***
Course code:	KZR/S2Z2
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Alena Kohlová
Term:	summer
Language of instruction:	English
Lectures/exercises:	Field experience (40 hours)
Requirements on student:	Completion of the course
Course goal:	The main goal is to expand knowledge and skills related to other IRS units, with which the paramedic will work closely.
Content:	**Contents of the course:** Water rescue service Water rescue, legislation, prevention and tactics Prevention of hydrology, special types of rescue Swimming training for the rescue service Basics of diving, tools Techniques of approaching the drowning, grasping Drowning - dragging techniques Techniques of taking the drowning out of the water Specifics of intervention in spinal cord injuries

Faculty:	**Faculty of Health Studies**
Course title:	***Emergency Medicine II***
Course code:	KZR/U2Z2
Level of course:	bachelor
ECTS:	3
Teacher:	PhDr. Mgr. et Mgr. Patrik Christian Cmorej, PhD., MHA, MUDr. Ilja Deyl, MUDr. Xaya Waicová,
Term:	summer
Language of instruction:	English
Lectures/exercises:	1/1
Requirements on student:	Min. 80% attendance in seminars Written test Oral exam
Course goal:	The course is conceived as a theoretical and practical complex. It includes comprehensive issues of diagnostics, therapy of acute and critical conditions, includes securing the patient in PNP, his transport and subsequent urgent care within the medical facility, including emergency admission. Students will get acquainted with the principles of air rescue services. An integral part is the issue of war medicine with all aspects of threat, including radiation, chemical and biological, the specifics of injuries - gunshot, devastating, etc. Information is also provided in the field of forensic medicine. The aim is to prepare a paramedic for the theoretical and practical management of the provision of specific nursing care in the area of pre-hospital emergency care.
Content:	**Lecture topics:** 1.PNP in patients with nervous system disorders: unconsciousness, convulsions, CMP, intracranial hemorrhage. 2.PNP in patients with nervous system disorders: brain swelling, CNS trauma, intoxication, acute mental states, vertigo and other CNS diseases. 3.PNP in patients with urogenital system disorders: renal colic, renal failure, disorders of the internal environment and ABR, other diseases of URGS. 4.PNP in patients with endocrine disorders: DM, acute conditions, metabolic disorders, thyrotoxic crisis and other acute events in endocrinology. 5.PNP in ENT and dentistry: injuries of the ear, nose, mouth and throat, fractures of the jaw, injuries of the face and foreign bodies, bleeding in dentistry. 6.PNP in ophthalmology: eye injuries, foreign body, glaucoma, other conditions in ophthalmology. 7.Specifics in PNP in geriatric patients: geriatric syndromes. Peculiarities in geriatric care, abuse of the elderly. 8. Infectious diseases in PNP: meningococcal meningitis, encephalitis, HIV, hepatitis. 9. Infectious diseases in PNP: common infectious diseases of childhood. 10. Infectious diseases in PNP: SARS, exotic diseases, epidemic problems. **Exercise topics:** 1. Acute conditions in neurology. 2. Acute conditions in urology. 3. Acute conditions in endocrinology. 4. Acute conditions in ENT and dentistry. 5. Acute conditions in ophthalmology. 6. Acute conditions in geriatrics. 7. Acute conditions in infectious medicine.

Faculty:	**Faculty of Health Studies**
Course title:	***Basics of medical research***
Course code:	KZR/ZVZ2
Level of course:	bachelor
ECTS:	1
Teacher:	RNDr. Karel Hrach, Ph.D.
Term:	summer
Language of instruction:	English
Lectures/seminars:	1/1
Requirements on student:	The basic precondition is the fulfillment of the attendance (min. 80% participation in direct teaching). Another prerequisite is active work (control of the elaboration of continuously assigned tasks using the e-learning system Moodle).
Course goal:	The course is conceived as a theoretical and practical which presupposes the application of knowledge acquired in other professional subjects and also a certain level of creativity. The students will learn to master the basic terminology of research, understand the importance of the basic stages of the research process and be able to use the results of research in rescue practice. The aim of the course is to teach students to participate in research projects and to acquaint them with the basic concepts of statistics (biostatistics) and basic statistical methods that are used in the evaluation of biological phenomena.
Content:	**Lecture topics:** 1. Basic terms: Survey / research, basic / applied research, qualitative / quantitative, experiment / investigation. 2. Principles and ethics of publishing: Copyright law, citation standards, open access, impact factor. 3. Qualitative research - selected methods (case study, interview). 4. Types and examples of clinical trials and studies. 5. Ethical and legislative aspects of clinical trials and studies (informed consent, GDPR). 6. Questionnaires - standardized questionnaires, pilot surveys. Multiple responses. Likert scale. 7. Quantitative research - population and selection, identifiers and types of statistical quantities. 8. Introduction to data analysis: Gaussian curve, population parameters, statistical hypotheses, level of significance. 9. Time series and its description, characteristics of the disease (database IHIS, CZSO). 10. Publication of scientific results. **Seminar topics:** 1. Excel: Frequencies, mode, contingency table, bar and pie chart. 2. Excel: Quantiles, mean, standard deviation, box-plot. 3. Excel: Selected examples of parametric tests - paired and two-sample t-test. 4. Excel: Selected examples of other analytical methods - chi-square test, linear regression model. 5. How to choose the topic of the bachelor thesis. 6. Structure of bachelor thesis. 7. Choice of bachelor thesis methodology, practical research. 8. Formal requirements of the bachelor's thesis, presentation. 9. Legislation in relation to the adoption of texts and images.

Faculty:	**Faculty of Health Studies**
Course title:	***Basics of medical management***
Course code:	KZR/ZMZ2
Level of course:	bachelor
ECTS:	2
Teacher:	Mgr. Jan Trpišovský
Term:	summer
Language of instruction:	English
Lectures/seminars:	2/1
Requirements on student:	-
Course goal:	The course is conceived as a theoretical. It acquaints students with the basics of modern management in the field of material and human resources, with the basics of quality management of health services and ensuring patient safety, safety at work in health and social care systems, provides information on health and economic issues. Part of the course is the issue of crisis management from the perspective of the security system of the state (tasks of individual bodies, measures to protect the population, preparation for the defense of the state, etc.)
Content:	**Lecture topics:** 1. Introduction to management, Health policy, current trends in health care. 2. Health care providers, medical institutions. 3. Levels of management. Personality and role of a manager in an organization / typology, qualities, authority, characteristics of a successful manager /. 4. Management activities / Planning and organizing in a medical facility /. Leadership styles, manager's responsibility, team in healthcare. 5. Public Relations as the main communication tool of a medical facility. 6. Decision-making process in a medical facility, the process of control in healthcare. 7. Quality management, processes and principles. Quality management models in healthcare, ISO, SAK, EFQM, JCIA. 8. Standardization. Internal audit, external audit. **Seminar topics:** 1. Management structure and leadership of organizations in health care. 2. Ensuring crisis preparedness. 3. Health service providers - emergency medical services, trauma plans, emergency income. 4. Basic components - ZZS, HZS, PČR. Joint interventions of components - STČ - type activities.

Faculty:	**Faculty of Health Studies**
Course title:	***Medical technology***
Course code:	KZR/ZTZ2
Level of course:	bachelor
ECTS:	1
Teacher:	Mgr. Martin Kubát
Term:	summer
Language of instruction:	English
Lectures/exercises:	0/1
Requirements on student:	Participation in seminars (min. 80 %) for getting the credit Written test Verification of practical skills
Course goal:	The course is conceived as a theoretical and practical. It provides summary information on medical devices and medical technology used in various medical facilities. The students will get acquainted with the possibilities of their selection, purchase, installation of the set, ensuring operation, especially from the point of view of the responsibility of paramedics in handling medical equipment.
Content:	**Exercise topics:** 1. Measuring and registration diagnostic methods - electrodiagnostic, electrochemical, monitoring options. 2. Measurement of blood pressure - principle. Vital signs monitors. 3. ECG, EEG monitoring, bioamplifier requirements. 4. Defibrillators, principles, indications for use, external pacing, intravascular, cardioverters. 5. Imaging diagnostic methods, principles, thermographic, ultrasound, Doppler and radionuclide. 6. Ultrasound in PNP (cannulation), intraosseous technique. 7. Fixing devices (vacuum mattress, limb splints, neck collars, pelvic girdle, Spencer's plate, head immobilizer). 8. Transport means for pediatric patient incl. premature and pathological newborns, material equipment. 9. Laboratory methods of monitoring in urgent care: glucometry, blood gas testing and ABR, Pointof-care-testing. 10. Artificial lung ventilation, principles, manual breathing apparatus, mechanical ventilation.