Table S.2.6.-04 Information lists for the Bachelor of Applied Studies in Nursing Programme

Study program
Bachelor Applied Studies
(Undergraduate Professional Studies)

NURSING

COURSE BOOK

(All courses are listed alphabetically for easier navigation)

Schedule of courses by semesters and years of study for the Bachelor of Applied Studies in Nursing Programme

Note: A separate column for clinical (professional) practice has been added to the table in order to demonstrate compliance with EU Directive 2005/36, which, among other requirements, specifies a mandatory number of these classes.

Abbreviations used in the table:

1) abbreviations for teaching activities: **theor lect** = theoretical lectures; **exer** = theoretical exercises; **other** = other forms of teaching (individual work with students, project work...); **prof pract** = professional (clinical) practice
2) abbreviations for mandatory/elective courses: **MCCMM** = Mandatory Common Course for Multiple Modules; **MMC =** Mandatory Module Course; **ECCMM =** Elective Common Course for Multiple Modules
3) abbreviations course type: **ag** = academic-general education; **p** = professional; **pa** = professional-applicative

Table S.2.6.-01 Schedule of courses by semesters and years of study

No.	Course Code	Course Name		Active Lessons			clinical pract.[1)]	ECTS	M/E Course [2)]	Course type [3)]
				theor lect[1)]	exer[1)]	other[1)]				
THE FIRST YEAR										
1	znj-01	Anatomy and Physiology		45	15	0	0	7	MCCMM	AG
2	znj-02	Basics of Nursing		30	15	0	360	8	MCCMM	PA
3	znj-03	Ethics in Health Care		30	30	0	0	5	MCCMM	AG
4	znj-04	Geriatrics with Nursing in Geriatrics		30	30	0	210	5	MCCMM	PA
5	znj-05	Basics of Information and Communication Technologies		15	30	0	0	5	MCCMM	PA
6	znj-izb-01	Elective Course 1		30	30	0	0	5	ECCMM	
6a	znj-izb-01-a	Business Communication Skills		30	30	0	0	5	ECCMM	PA
6b	znj-izb-01-b	Medical and Pharmaceutical Waste		30	30	0	0	5	ECCMM	AG
6c	znj-izb-01-c	Specialized English for Medicine 1		30	30	0	0	5	ECCMM	AG
7	znj-06	Hygiene with the Basics of Microbiology and Parasitology		30	30	0	330	5	MCCMM	P
8	znj-07	Health Care Education Methodology and Health Promotion		15	30	0	0	5	MCCMM	P
9	znj-08	Public Health		30	30	0	0	5	MCCMM	AG
10	znj-09	Organization of Health Care Systems		15	30	0	0	5	MCCMM	P
11	znj-izb-02	Elective Course 2		30	30	0	0	5	ECCMM	
11a	znj-izb-02-b	Biological Materials and Laboratory Techniques		30	30	0	0	5	ECCMM	PA
11b	znj-izb-02-b	Biophysics with Biomechanics		30	30	0	0	5	ECCMM	PA
Total number of active classes and ECTS per year:				**300**	**300**	**0**		**60**		
Total clinical practice hours/year:							**900**			

THE SECOND YEAR										
12	znj-10	Pathophysiology		45	30	0	0	6	MCCMM	P
13	znj-11	Basics of Internal Medicine and Internal Medicine Patient Nursing		60	45	0	360	10	MCCMM	PA
14	znj-12	Basics of Gynecology and Obstetrics and Nursing in Gynecology and Obstetrics		30	45	0	180	8	MCCMM	PA
15	znj-13	First Aid		30	30	0	0	5	MCCMM	PA
16	znj-izb-03	Elective Course 3		30	30	0	0	5	ECCMM	
16a	znj-izb-03-a	Human Resources Management in Health Care		30	30	0	0	5	ECCMM	PA
16b	znj-izb-03-b	Sports Medicine		30	30	0	0	5	ECCMM	PA
16c	znj-izb-03-d	Specialized English for Medicine 2		30	30	0	0	5	ECCMM	AG
17	znj-14	Healthy Lifestyle and Sociology of Health and Diseases		15	15	0	0	6	MCCMM	P
18	znj-15	Basics of Pediatrics and Child and Adolescent Nursing in Pediatrics		30	30	0	210	10	MCCMM	P
19	znj-16	Diagnostically-Therapeutic Program		30	45	0	150	5	MCCMM	PA
20	znj-izb-04	Elective Course 4		30	30	0	0	5	ECCMM	
20a	znj-izb-04-a	Marketing of Health Care Institutions		30	30	0	0	5	ECCMM	PA
20b	znj-izb-04-b	Pharmacology and Drug Dosing		30	30	0	0	5	ECCMM	P
Total number of active classes and ECTS per year:				**300**	**300**			**60**		
Total clinical practice hours/year:							**900**			

THE THIRD YYEAR										
21	znj-17	Basics of Surgery with Orthopedics and Surgical Patient Nursing		60	45	0	360	8	MCCMM	P
22	znj-18	Basics of Psychiatry and Neurophysiology of Pain with Psychiatric Patient Nursing		30	30	0	270	7	MCCMM	PA
23	znj-mod-01	Mandatory Module Course 1		45	45	0	0	5	MMC	
23a	znj-mod-01-a	MODULE Patient Care at Home and Patronage Nursing: Patient Care at Home and Patronage Nursing		45	45	0	0	5	MMC	P
23b	znj-mod-01-b	MODULE Public Health: Health Care and Social-Security Legislation		45	45	0	0	5	MMC	P

24	znj-izb-05	Elective Course 5		30	30	0	0	5	ECCMM	
24a	znj-izb-05-a	Mental Hygiene		30	30	0	0	5	ECCMM	P
24b	znj-izb-05-b	Medical Rehabilitation		30	30	0	0	5	ECCMM	P
24c	znj-izb-05-d	Business English		30	30	0	0	5	ECCMM	AG
25	znj-20	Emergency Medicine and Nursing in Special Conditions		30	30	0	270	7	MCCMM	PA
26	znj-19	Psychology in Nursing and Health Care		15	30	0	0	3	MCCMM	P
27	znj-21	Quality Control		30	30	0	0	5	MCCMM	P
28	znj-mod-02	Mandatory Module Course 2		30	30	0	0	5	MMC	
28a	znj-mod-02-a	MODULE Patient Care at Home and Patronage Nursing: Basics of Oncology and Nursing of Oncological Patients		30	30	0	0	5	MMC	P
28b	znj-mod-02-b	MODULE Public Health: Health Care Systems in the EU		30	30	0	0	5	MMC	P
29	znj-izb-06	Elective Course 6		30	30	0	0	5	ECCMM	
29a	znj-izb-06-a	Intensive Care Unit Nursing		30	30	0	0	5	ECCMM	PA
29b	znj-izb-06-b	Research Methodology		30	30	0	0	5	ECCMM	P
30	znj-22	Degree Paper		0	0	300	0	10	MCCMM	P
Total number of active classes and ECTS per year:				**300**	**300**	**300**		**60**		
Total clinical practice classes/year:							**900**			
Total number of active classes and ECTS for the study program:				**2.100**				**180**		
Total clinical practice classes for the study program:							**2.700**			
TOTAL number of active classes + clinical practice classes and ECTS for the study program:				**4.800**				**180**		

ANATOMY AND PHYSIOLOGY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Anatomy and Physiology					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-01	mandatory	first	7	lectures	45
				exercises	15
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Acquisition of knowledge on organ and human body system morphology. Familiarity with and understanding normal anatomical and histological structures and notions. Acquisition of knowledge in the area of cell, tissue, organ system and human organism physiology aimed at understanding the changed, pathological functioning and treatment possibilities. Knowledge of and understanding the role of organ control mechanisms, as well as understanding connection between regulatory systems in human organism. Provision of theoretical basis required for learning other courses.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Basic anatomical terminology. Body areas and parts. Upper extremities. Bones, joints, muscles, blood vessels and nerves.				
Week II	Lower extremities. Bones, joints, muscles, blood vessels and nerves. Rib cage. Walls, division and content of the thoracic cavity.				
Week III	Lungs and pulmonary pleurae. Heart. Mediastinum organs. Abdomen. Walls, division and content of abdominal cavity.				
Week IV	Peritoneum. Peritoneal cavity (liver, stomach, spleen, pancreas, small intestine and large intestine). Retroperitoneal space (kidney, adrenal gland, aorta, inferior vena cava, celiac plexus).				
Week V	Pelvis. Wall and content. Urinary bladder, rectum, male and female reproductive system. Pelvic diaphragm.				
Week VI	Head and neck. Head and facial bones. Head and neck muscles. Head and neck large blood vessels and nerves. Central nervous system.				
Week VII	Human physiology study. Transport through cell membrane. Intercellular communication.				
Week VIII	Explicitation physiology. Membrane potential of inactivity. Action potential. Nervous impulse transmission.				
Week IX	Skeletal muscle physiology. Neuro muscular sinapse. Morphophysiological characteristics of skeletal muscles.				
Week X	Smooth muscle physiology. Characteristics of smooth muscle tissue structure, types, innervation, electrical activity of smooth muscles, specific features of contraction.				
Week XI	Central nervous system organization. Nerve cell. Hematoencephalic barrier, cerebrospinal fluid, composition and function.				

Week XII	Spinal cord. Medulla oblongata. Midbrain. Functional characteristics; reticulo-cortical relations, decerebration rigidity and skeletal muscle tone.
Week XIII	Cerebellum, structure and function. Diencephalon. Hypothalamus. Vegetative nervous system. Basal ganglia. Cerebral cortex.
Week XIV	Senses. Definition, importance and general principles of sensory systems. Sense of hearing and balance.
Week XV	Sense of taste and smell. Eyesight. Pain perception. Introductory notes in pathophysiology.

Methods of teaching:
Lectures and practical exercises with anatomical and hystological devices, use of atlas, video projections, computer animations and simulations of physiological processes.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature

1. Stojšić-Džunja Lj.: Anatomija za studente zdravstvene nege, udžbenik, Medicinski fakultet, Novi Sad, 2017
2. Stefanović N.: Anatomija čoveka za studente farmacije, udžbenik, Medicinski fakultet, Niš, 2005
3. Veličković D.: Fiziologija za studente farmacije, udžbenik, Medicinski fakultet, Niš, 2013
4. Mitrović D. M., Mazić S. D., Petrović M. M.: Osnovi fiziologije čoveka, udžbenik, Medicinski fakultet, Beograd, 2011

Recommended Literature:

5. Mihalj M.: Anatomija čoveka, udžbenik, Medicinski fakultet, Novi Sad, 2006
6. Mačvanin Đ.: Anatomija, udžbenik, Fakultet za menadžment u sportu, Beograd i Matica srpska, Novi Sad, 2005
7. Milisavljević M. i sar.: Klinička anatomija, udžbenik, Nauka, Beograd, 2004
8. Mujović i sar.: Medicinska fiziologija, udžbenik, Medicinski fakultet, Kosovska Mitrovica (Priština), 2004
9. Stanić V., Maličević Ž. i sar.: Grudna hirurgija (ur.: Jaković R. M.), udžbenik, Medicinski fakultet, Beograd, 2004
10. Despopoulos A., Silbernagl S.: Fiziološki atlas u boji za studente medicine, Medicinski fakultet, Niš, 2007
11. Guyton A. C., Hall J. E.: Medicinska fiziologija, Savremena administracija, Beograd, 2006
12. Netter F. H., Machado, C. A. G.: Atlas of Human Anatomy & CD, Mala velika knjiga, Novi Sad, 2005
13. Drake R., Wayne A., Mitchell A.: Gray's Anatomy for Students, Elseivier, London, 2020
14. Moore K. L., Dalley A. F., Agur A. M. R.: Clinically Oriented Anatomy, Lippincott Williams & Wilkins, New York, 2013
15. Arroyo J. P.: Back to Basics in Physiology Academic Press, London, 2013
16. Silverthorn D. U.: Human Physiology, Pearson/Benjamin Cummings, London, 2004

Course outcome (aligned with the study program outcomes):
Capability of defining, describing, integrating and reproducing notions relating to normal anatomical and histological structures. Upon the completion of the course and passing the exam students will: have a command of the corresponding part of medical nomenclature, be able to explain functioning of individual organs and organ systems, will be familiar with and will understand integrated functions of individual organs and the role of organism control mechanisms and they will know and understand the connection of the regulatory system of human organism enabling its adaptation to changes in internal and external environment under everyday conditions.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points

attendance at lectures	3	exam	20 (anatomy) 20 (physiology)
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	10 (anatomy) 10 (physiology)	-	-
midterms	15 (anatomy) 15 (physiology)	-	-
Full name of the lecturers and teaching associates:			
Lecturer:	Igor Kumburović, PhD, Professional Studies Professor, Specialist in Surgery Ivana Kaćanski, PhD, Professional Studies Professor		
Teaching Associate:	Igor Kumburović, PhD, Professional Studies Professor, Specialist in Surgery		
Specific features that need to be emphasized for the course: no			
Note (if applicable): no			

BASICS OF GYNECOLOGY AND OBSTETRICS AND NURSING IN GYNECOLOGY AND OBSTETRICS

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Basics of Gynecology and Obstetrics and Nursing in Gynecology and Obstetrics

Course Code	Course Status	Year	Number of ECTS	Number of classes	
znj-12	mandatory	second	10	lectures	30
				exercises	45
				other forms of active classes	0
				professional practice	180

Study programs for which it is organized:
Bachelor of Applied Studies in Nursing

Prerequisites:
Basics of Nursing

Course objective:
Training students to use the acquired knowledge in education of population aimed at improvement and preservation of reproductive health, health check-ups, participation in diagnostic processes and therapy, planning and implementation of nursing of women.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	The most frequent and most important conditions in women.
Week II	The most common diagnostics, prevention, and treatment of diseases in women.
Week III	Therapeutic diagnosis in gynecology.
Week IV	Physical aspects of pregnancy, education and nursing of pregnant women, postpartum women and breastfeeding women.
Week V	Psychological and social aspects of pregnancy, education and nursing of pregnant women, postpartum women and breastfeeding women.
Week VI	Therapeutic diagnosis in obstetrics.
Week VII	Physical, psychological and social aspects of marital sterility and menopause.
Week VIII	The importance of education and care related to sexual relations, pregnancy, abortion, childbirth, and child care.
Week IX	Specific features of nursing in gynecology and obstetrics and their subspecialties.
Week X	Specific features of nursing in obstetrics.
Week XI	Anatomy and physiology of the reproductive system.
Week XII	Inflammatory changes of reproductive system, benign and malignant changes of the reproductive system, urogynecology.
Week XIII	Sterility, family planning.
Week XIV	Pregnancy physiology, pathology of early and late pregnancy, normal child birth, child birth pathology.
Week XV	Fetal growth monitoring methods, fetal lactation physiology.

Methods of teaching:
Lectures using various video materials, exercises, model-based practice, and clinical practice.

Student workload:

weekly: 5	per semester: 75

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:

Recquired Literature:

1. Đurđević S., Kopitović V., Kapamacija A.: Ginekologija, udžbenik, Medicinski fakultet, Novi Sad, 2015

Recommended Literature:

2. Dinulović D.: Savremena ginekologija, Agencija za marketing DON VAS, 2006
3. Jacob A.: A Comprehensive Textbook of Midwifery and Gynecological Nursing, Jaypee Brothers Medical Pub, New York, 2015
4. Hoffman B., Schorge J., Bradshaw K., Halvorson L., Schaffer J., Corton M.: Williams Gynecology, Mc-Graw-Hill Education, 2016
5. Beckmann C. R. B., Herbert W., Laube D., Ling F., Smith R.: Obstetrics and Gynecology, LWW, Liverpool, 2013

Course outcome (aligned with the study program outcomes):

Upon the completion of the course, students will be able to recognize pathology of early and late pregnancy, nurse prematurely born babies, apply the procedure of transfer of prematurely born babies, take part in diagnostic and therapeutic interventions.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Milica Živaljević, PhD, Professional Studies Professor, Specialist in Oncology
Teaching Associate:	Mira Stjepanović, Teaching Associate, Master Professional Nurse Milica Janović, Teaching Associate, Master Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

BASICS OF INFORMATION AND COMMUNICATION TECHNOLOGIES

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Basics of Information and Communication Technologies					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-05	mandatory	first	5	lectures	15
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Course objective is to enable students to acquire basic knowledge in the area of application of information-communication technologies in health care institutions, familiarizing with text processing software tools and with tabular calculations computer programs.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Organization of information technology service in health care institution.				
Week II	Types of information systems.				
Week III	Information systems within health care system. Acquisition and acceptance of new information systems in health care, need for continuous updating.				
Week IV	Work of health care worker within IT system.				
Week V	Professional equipment. Computer networks, basics of telecommunications, and types of telecommunication systems. Software.				
Week VI	Basics of system analysis. System functioning testing. Standards of information technologies system in health care.				
Week VII	Patient recording. Importance of permanent and timely entry of data into system.				
Week VIII	Connection of the system with other national systems. Unique system of patient tracking.				
Week IX	Trends of connecting health care institutions system with pharmaceutical systems.				
Week X	Patient data protection.				
Week XI	The Internet, internet address, internet access, internet protocols, HTML, World Wide Web, internet services. Windows.				
Week XII	Specific program used in pharmacy practice.				
Week XIII	Basic program languages used by health care professionals (Word, Excell, Power Point).				
Week XIV	Security systems in health care institutions, panic keys.				
Week XV	Panic buttons.				
Methods of teaching: Lectures, practical classes, work with real software applications, and exercises.					
Student workload:					
weekly: 3			per semester: 45		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Tasić M., Ćirić M.: Osnovi informatike, udžbenik, Prirodno-matematički fakultet, Niš, 2018

Recommended Literature:

2. Milošević Z., Bogdanović D.: Statistika i informatika u oblasti medicinskih istraživanja, udžbenik, Medicinski fakultet, Niš, 2012
3. Bunzel T.: Microsoft Office 2010 Kao od šale, CET, Beograd, 2010
4. Softver HELIANT za rad u zdravstvenoj ustanovi, demo verzija.
5. Biheller B. R., Evans J., Pinard T. K., Romjer M. R.: Microsoft Office 2007: Introductory Course, Course Technology, Boston, 2007
6. Menvielle L., Audrain-Pontevia A. F., Menvielle W.: The Digitization of Healthcare, Palgrave Macmillan, London, 2007
7. Patersen A.: Digital Health and Technological Promise, a Sociological Inquiry, Routledge, London, 2018

Course outcome (aligned with the study program outcomes):

Upon passing the exam students will be able to apply the acquired knowledge on computer hardware, peripheral units, software tools, multimedia and the internet in real-life situations in health care institutions, or to use the acquired knowledge to improve the current work in health care institutions. In addition to that, application of calculation or text processing program is important for everyday work of health care professionals.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	30	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Živko Avramov, PhD, Professional Studies Professor Srđan Stojanović, PhD, Professional Studies Professor
Teaching Associate:	Dijana Kukuličić, Teaching Associate, Specialist Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

BASICS OF INTERNAL MEDICINE AND INTERNAL MEDICINE PATIENT NURISNG

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Basics of Internal Medicine and Internal Medicine Patient Nurisng					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-11	mandatory	second	10	lectures	60
				exercises	45
				other forms of active classes	0
				professional practice	360
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: Basics of Nursing					
Course objective: Adoption of current theoretical and practical specialist knowledge in internal medicine, nursing of internal-medicine patients and training in application of acquired knowledge in health care professional work.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Cardiology. Specific features of nursing in heart rhythm, pacemaker implantation and electrophysiology ward.				
Week II	Diagnostics, therapy and prevention of artery hypertension. Specific features of nursing in cardiology wards.				
Week III	Prevention, diagnostics and treatment coronary disease risk factors. Diagnostics and treatment of acute coronary syndrome.				
Week IV	Most frequent and most important pulmonary diseases, diagnostics, prevention and treatment. Specific features of nursing in pulmonary wards.				
Week V	Most frequent and most important internal oncology diseases, diagnostics, prevention and treatment.				
Week VI	Specific features of the application of cytostatic and chemotherapy treatments in internal medicine patients.				
Week VII	Most frequent and most important hematologic diseases, diagnostics, prevention and treatment. Most frequent and most important hematologic diseases, diagnostics, prevention and treatment.				
Week VIII	Specific features of nursing in hematology wards.				
Week IX	Nursing and care of patients with hemorrhagic syndrome. Nursing and care of immunocompromised patients.				
Week X	Most frequent and most important gastrointestinal and biliopancreatic diseases, diagnostics, prevention and treatment. Most frequent and most important liver diseases.				
Week XI	Specific aspects of nursing care in gastroenterology departments. Preparation of patients for endoscopic diagnostic procedures.				
Week XII	Endocrinology. Most frequent and most important endocrinology diseases, diagnostics, prevention and treatment. Specific features of nursing in endocrinology wards. Insulin therapy regimes. Diabetic foot nursing.				

Week XIII	Most frequent and most important nephrology diseases, diagnostics, prevention and treatment.
Week XIV	Most frequent and most important immunology diseases, diagnostics, prevention and treatment. Specific features of nursing in nephrology and immunology wards.
Week XV	Specific features of nursing in dialysis wards. Conducting peritoneal dialysis.

Methods of teaching:
Lectures using various video materials, model-based practice, and exercises.

Student workload:

weekly: 7	per semester: 105

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Kopitović I.: Interna medicina za studente zdravstvene njege, udžbenik, Medicinski fakultet, Novi Sad, 2015
2. Antić S., Ilić S., Interna medicina, udžbenik, Medicinski fakultet, Niš, 2009

Recommended Literature:
3. Manojlović D. i dr.: Interna medicina I, udžbenik, Zavod za udžbenike i nastavna sredstva, Beograd, 2013
4. Manojlović D. i dr.: Interna medicina II, udžbenik, Zavod za udžbenike i nastavna sredstva, Beograd, 2013
5. Đurica S.: Interna medicina, udžbenik, Viša medicinska škola, Beograd, 2010
6. Kasper D., Fauci A., Hauser S., Longo D.: Harrison's Principles of Internal Medicine, McGraw-Hill Professional, New York, 2015
7. Humes H. D., DuPont H. L., Gardner L. B., Griffin J. W., Harris Jr. E. D., Hazzard W. R., King Jr. T. E.: Kelley's Textbook of Internal Medicine, LWW, Liverool, 2010
8. Herdman J., Kamitsuru L.: Nursing Diagnoses, Thieme, New York, 2020

Course outcome (aligned with the study program outcomes):
Upon the completion of the course students are trained to recognize in individual and team work cardiovascular, pulmonary, nephrology, endocrinology, gastroenterology, hematology and oncology conditions.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Brane Gavrančić, PhD, Professional Studies Professor
Teaching Associate:	Zlatko Ćirić, Teaching Associate, Master of Healthcare Organization, Vukica Đukić, Teaching Associate, MSc of Nursing and Therapy

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BASICS OF NURSING

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Basics of Nursing

Course Code	Course Status	Year	Number of ECTS	Number of classes	
znj-02	mandatory	first	8	lectures	30
				exercises	15
				other forms of active classes	0
				professional practice	360

Study programs for which it is organized:
Bachelor of Applied Studies in Nursing

Prerequisites:
no

Course objective:
Adoption of basic notions in nursing and basic theoretical and practical (resourcefulness) specialist knowledge in nursing, and training in application of the acquired knowledge in professional and research work. Self-education aimed at own protection, protection of patients and other team members, development of critical thinking, independence in nursing and team work abilities.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Theoretical consideration of basic and general notions in medicine.
Week II	Theoretical consideration of basic and general notions in nursing.
Week III	Development of nursing.
Week IV	Nursing and society.
Week V	Requirements for quality nursing in hospital and out-of-hospital circumstances.
Week VI	Nurse interventions at patient hospitalization.
Week VII	Nursing process.
Week VIII	Data gathering and assessment of needs of patients for nursing.
Week IX	General (universal) problems in nursing.
Week X	Nursing of specific groups.
Week XI	Nursing documentation.
Week XII	Models (methods) of organization of provision of nursing.
Week XIII	Progressive nursing and patient categorization.
Week XIV	Improvement of nursing through research work of nurses.
Week XV	Progressive nursing and patient categorization.

Methods of teaching:
Lectures using various video materials, dummy exercises, simulation, exercises, problem-based case study analysis, discussion, workshop.

Student workload:

weekly: 3	per semester: 45

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:

Required Literature:

1. Rajak S., Imbronjev V.: Osnovi zdravstvene nege, udžbenik, Omega MS Pharmacy, Novi Sad, 2016

Recommended Literature:

2. Tijanić M., Đuranović D., Rudić R., Milović Lj.: Zdravstvena nega i savremeno sestrinstvo, udžbenik, Naučna KMD, Beograd, 2012
3. Babić L.: Zdravstvena nega u radiologiji, udžbenik, Licej, Beograd, 2011
4. Standardizovane aktivnosti zdravstvene nege i zbrinjavanja pacijenta, Vodič za medicinske sestre i tehničare, 2012
5. Maksimović J.: Uvod u medicinu sa teorijom medicine, udžbenik, Medicinski fakultet, No vi Sad, 2011
6. Rudić R., Kocev N., Munćan V.: Proces zdravstvne nege, Praktikum za studente - vodič za praksu, Knjiga-komjerc, Beograd, 2015
7. Stojković B.: Zdravstvena nega u radiologiji, udžbenik, Naučna knjiga, Beograd, 2006.
8. Taylor C., Lynn P., Bartlett J.: Fundamentals of Nursing, Wolters Kluwer Health, London, 2018.
9. Gulanick M., Myers J. L.: Nursing Diagnoses, Interventions and Outcomes, Elsevier Health Sciences, London, 2011
10. Jacob A.: A Comprehensive Textbook of Midwifery and Gynecological Nursing, Jaypee Brothers Medical Pub, New York, 2015
11. Burke K. M., Bauldoff G., LeMone P.: Medical-Surgical Nursing, Critical Thinking in Patient Care, Pearson Education, New York, 2011
12. Morton P. G., Fontaine D. K.: Critical Care Nursing: A Holistic Approach, Wolters Kluwer, Doublin, 2008

Course outcome (aligned with the study program outcomes):

Adoption of a holistic approach in nursing. Skills. Development of professional awareness, responsibility, humanity, sense of deontology, aesthetics and communication with patients and professional team. Student independence in nursing, mastered nurse intervention and interdependent nurse intervention in the field of diagnostics and therapy.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics Slavica Konević, PhD, Professional Studies Professor
Teaching Associate:	Dijana Kukuličić, Teaching Associate, Specialist Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

BASICS OF ONCOLOGY AND NURSING OF ONCOLOGICAL PATIENTS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Basics of Oncology and Nursing of Oncological Patients					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-mod-02	mandatory	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: Basics of Nursing					
Course objective: Course objective is familiarization of students with origin and occurrence of malignant cell, manner of malignant tumor spreading, their epidemiology and etiology, possibilities of early detection of malignant tumor and premalignant lesions, diagnostics and histological confirmation of malignant tumors. It is necessary to familiarize students with team work in planning oncology treatement, types of treatment and, which is very important, with recognition of complications appearing in the course of treatment of patients with malignant tumors.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Origin and biology of the malignant cell.				
Week II	Carcinogenesis.				
Week III	Genetic predisposition.				
Week IV	Epidemiology and etiology of malignant tumors.				
Week V	Early detection of malignant tumors.				
Week VI	Diagnosis and pathology of carcinoma.				
Week VII	Assessment of disease extent and principles of treatment.				
Week VIII	Surgical principles of treatment.				
Week IX	Basic principles of radiotherapy in oncology.				
Week X	Basic principles of systemic therapy.				
Week XI	Oncologic emergencies.				
Week XII	Complications of oncological treatment.				
Week XIII	Paraneoplastic syndrome and stress in oncology.				
Week XIV	Oncological rehabilitation.				
Week XV	Informatics in oncology.				
Methods of teaching: Lectures, exercises, case analysis, e-learning, and clinical practice.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature

1. Jovanović D. (ur.): Osnovi onkologije i palijativna njega, udžbenik, Medicinski fakultet, Novi Sad, 2008
2. Kopitović I.: Interna medicina za studente zdravstvene njege (odabrana poglavlja), udžbenik, Medicinski fakultet, Novi Sad, 2015

Recommended Literature:

3. Terzić N.: Zdravstvena njega u hirurgiji, udžbenik, autorsko izdanje, Lazarevac, 2006
4. DeVita T. V.: Cancer Principles and Practice of Oncology, Lippincott, New Jercy, 2010
5. Stephens F. O., Aigner K. R.: Basic of Oncology, Springer Verlag, Munchen, 2009
6. Langhorne M., Fulton J., Otto S.: Oncology Nursing, Mosby, London, 2007

Course outcome (aligned with the study program outcomes):

The purpose of the course is to familiarize students with the difficulties oncology patients have prior to and in the course of diagnostic procedure, in the course of treatment and after it, to understand the basic prevention of malignant tumors and recognition of the procedure of early discovery of malignant tumors. Takođe, nakon završenog kursa i položenog ispita student bi trebalo da zna vrste i oblike onkološkog liječenja, kako bi razumio dileme i probleme koje imaju oboljeli, a sve to u cilju poboljšanja kvaliteta života oboljelih. It is important for them to recognize at the moment of difficulties those conditions in which it is possible to intervene professionally. Students also study basic principles of pain therapy, psycho-oncological aspect of patients and their families, and they are taught to understand the early and late rehabilitation of oncology patients. Having completed the course, students are familiar with new scientific-technical achievement in the field of diagnostics and treatment of oncology patients, and the application of information systems in oncology.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Milica Živaljević, PhD, Professional Studies Professor, Specialist in Oncology
Teaching Associate:	Milica Živaljević, PhD, Professional Studies Professor, Specialist in Oncology Zlatko Ćirić, Teaching Associate, Master of Healthcare Organization

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

BASICS OF PEDIATRICS AND CHILD AND ADOLESCENT NURSING IN PEDIATRICS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Basics of Pediatrics and Child and Adolescent Nursing in Pediatrics					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-15	mandatory	second	10	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	210
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: Basics of Nursing					
Course objective: Familiarizing students with medically healthy and sick children, pediatric treatment process and the role of health care professional dealing with nursing in pediatrics. Study analysis and planning needs in pediatric nursing of patients for individuals and groups. Understanding the importance of inclusion of parents in nursing of children. Improvement of possibilities of successful communication of treated children, parents and medical team.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Evidence-based pediatric nursing care. Application of the nursing process to individual daily basic activities – the conceptual model of V. Henderson.				
Week II	Involvement of parents in the healthcare of children and adolescents. Care of healthy children of all ages. Care of preterm infants. Care of ill children.				
Week III	Health care of children with special needs. Nursing care of children experiencing pain.				
Week IV	Nutrition of the newborn. Neonatology. Genetics. Growth and development of children. Child nutrition. Nephrology and endocrinology.				
Week V	Cardiology. Pulmonology and dermatology. Emergency medicine. Psychiatry and neurology. Social pediatrics.				
Week VI	Poisoning and injuries. Discrepancy between physical and psychological maturity. Adolescent medicine. Nursing interventions in prenatal diagnostics.				
Week VII	Specific features of nursing care for children with congenital metabolic disorders.				
Week VIII	Specific features of nursing care in neonatology. Nursing interventions in monitoring growth and development.				
Week IX	Basic principles of nutrition for healthy and ill children. Specific features of nursing care for children with eating disorders.				
Week X	Specific features of nursing care for children with endocrine diseases. Specific features of nursing care in pediatric gastroenterology.				
Week XI	Specific features of nursing care in pediatric pulmonology departments. Specific features of nursing care in pediatric cardiology departments.				
Week XII	Specific features of nursing care in pediatric immunology departments. Specific features of nursing care in pediatric hematology departments.				
Week XIII	Specific features of nursing care in neuropediatric departments. Specific features of nursing care in neuropediatric departments.				

Week XIV	Specific features of nursing care for children with endocrine diseases. Specific features of nursing care in pediatric nephrology departments.
Week XV	Nursing interventions during pediatric resuscitation and in the most common emergency conditions in pediatrics.

Methods of teaching:
Lectures using various video materials, model-based practice, and exercises.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature
1. Mardešić D.: Pedijatrija, udžbenik, Školska knjiga, Zagreb, 2016
2. Jovanović Privrodski J. (ur): Pedijatrija, udžbenik, Medicinski fakultet, Novi Sad, 2012
3. Marinković Lj.: Zdravstvena njega u pedijatriji, udžbenik, G. A. D., Beograd, 2007

Recommended Literature:
4. Felc Z.: Osnove neonatologije, udžbenik, Fakulteta za zdravstvene vede, Maribor, 2008
5. Kliegman R. M., Stanton B., Geme J. S., Schor N. F., Behrman R. E.: Nelson Textbook of Pediatrics, Saunders, Los Angeles, 2011
6. El -Naggar M.: Basic Clinical Pediatrics, University Book Center, Cairo, 2013
7. Ball J. W.: Pediatric Nursing, Pearson education, Prentice Hall, New Jersey, 2008
8. Hockenberry M. J., Wilson D.: Wong's Nursing Care of Infants and Children, Elsevier Health Sciences, London, 2018
9. Maaks D. L. G., Starr N. B., Brady M. A., Gaylord N. M., Driessnack M., Duderstadt K.: Burns' Pediatric Primary Care, Elsevier Health Sciences, London, 2019

Course outcome (aligned with the study program outcomes):
Upon completion of the course and practical classes, and after passing the exam, the student should be qualified to apply the acquired professional knowledge of pediatrics and nursing interventions in pediatrics, as well as communication skills in pediatric care when working with young patients and their family members, and to practically apply the acquired knowledge and skills within pediatric nursing care.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics
Teaching Associate:	Mira Stjepanović, Teaching Associate, Master Professional Nurse Tijana Rakonjac, Teaching Associate, Master Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BASICS OF PSYCHIATRY AND NEUROPHYSIOLOGY OF PAIN WITH PSYCHIATRIC PATIENT NURSING

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Basics of Psychiatry and Neurophysiology of Pain with Psychiatric Patient Nursing

Course Code	Course Status	Year	Number of ECTS	Number of classes	
znj-18	mandatory	third	7	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	270

Study programs for which it is organized:
Bachelor of Applied Studies in Nursing

Prerequisites:
Basics of Nursing

Course objective:
Familiarization of students with the specifics of psychiatry as a branch of medicine and psychiatric patients. Recognition of specific mental disorders and mastering aspects of their care and treatment. Additionally, the course aims to introduce the students to the concept, importance and neurophysiology of pain, the physiology and classification of pain, as well as its medical definition and division.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Diagnostics of mental disorders. Dynamic psychiatry. Schizophrenia. Mood disorders.
Week II	Delusional disorders. Anxiety disorders. Psychophysical disorders.
Week III	Personality disorders. MOPS. Addictive diseases. Child psychiatry.
Week IV	Psychopathological reactions to stressful situations. Psychiatric emergencies. Consultation–liaison psychiatry.
Week V	Forensic psychiatry. Neurophysiology of pain.
Week VI	Specific features of nursing care, etiology, and clinical presentation of organic mental disorders.
Week VII	Specific features of nursing care, etiology, and clinical presentation of substance use disorders.
Week VIII	Specific features of nursing care, etiology, and clinical presentation of schizophrenia and related disorders.
Week IX	Specific features of nursing care, etiology, and clinical presentation of mood disorders.
Week X	Specific features of nursing care, etiology, and clinical presentation of anxiety disorders.
Week XI	Specific features of nursing care, etiology, and clinical presentation of psychiatric disorders in childhood and adolescence.
Week XII	Specific features of nursing care, etiology, and clinical presentation of suicidal patients.
Week XIII	Depression. Domestic violence, safe houses, peer violence.
Week XIV	Marginalized groups, LGBT persons, people with special needs.

Week XV	Drug dependence. The notion of pain; significance of pain; neurophysiology of pain. Physiology and pain classification. Definitions of pain. Pain division (according to duration, location, pathogenesis, etiology and intensity). Acute pain. Chronic pain (classification, prevalence). Somatic pain. Visceral pain. Referred pain. Neuropathic pain (peripheral, central). Nociceptive and neuropathic pain. Neural plasticity. Pain receptors (nociceptors) and pain receptor simulation. Nociceptive fibers. Pain modulation. Opioid peptide receptors. Sensitization. Pain theories. Cancer pain. Headache. Migraines.

Methods of teaching:
Lectures using various video materials, exercises, workshops, e-learning, discussion, and clinical practice.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Marić J.: Klinička psihijatrija, udžbenik, Data status, Beograd, 2015

Recommended Literature:
2. Nedić A., Živanović O.,: Psihijatrija, udžbenik, Medicnski fakultet, Nov i Sad, 2009
3. Azam M., Qureshi M., Kinnair D.: Psychiatry: A Clinical Handbook, Scion Publishing Ltd, London, 2016
4. Stoudmire A.: Clinical Psychiatry for Medical Students, LWW, Liverpool, 2008
5. Videbeck S.: Psychiatric Mental Health Nursing, LWW, Liverpool, 2018
6. Crouch R., Alers V.: Occupational Therapy in Psychiatry and Mental Health, Wiley-Blackwell, New Jersey, 2015

Course outcome (aligned with the study program outcomes):
Upon completion of the course, the student should possess knowledge on individual psychiatric disorders and their care, as well as knowledge on the care of individuals suffering from psychiatric disorders. The course outcome includes the students' mastering communication skills with individuals suffering from psychiatric disorders, formulating a working diagnosis and mastering skills in the care of individuals suffering from mental disorders. In addition to that, the course outcome is students acquiring knowledge on the concept, importance, neurophysiology, physiology and classification of pain, as well as the definition and division of pain.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Jadranka Jovanović Privrodski, PhD, Professional Studies Professor, Specialist in Pediatrics, Subspecialist in Developmental Neurology and Psychiatry, and Subspecialist in Clinical Genetics
Teaching Associate:	Danijela Radoičić, Teaching Associate, Master of Management in the Healthcare System

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BASICS OF SURGERY WITH ORTHOPEDICS WITH SURGICAL PATIENT NURSING

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Basics of Surgery with Orthopedics with Surgical Patient Nursing					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-17	mandatory	third	8	lectures	60
				exercises	45
				other forms of active classes	360
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: Basics of Nursing					
Course objective: Acquisition of theoretical knowledge and skills in nursing patients in all surgery branches.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Principles of asepsis and antisepsis. Therapy of diseases of the digestive and endocrine systems.				
Week II	Therapy of injuries of the digestive and endocrine systems.				
Week III	Therapy of diseases of the musculoskeletal system. Therapy of injuries of the musculoskeletal system.				
Week IV	Therapy of diseases and injuries of blood and lymphatic vessels.				
Week V	Therapy of diseases and injuries of the central and peripheral nervous systems.				
Week VI	Therapy of diseases and injuries of the skin; principles of reconstructive and aesthetic surgery.				
Week VII	Therapy of diseases and injuries of the genitourinary tract.				
Week VIII	Therapy of diseases and injuries of the chest and lungs.				
Week IX	Therapy of diseases and injuries of the heart; extracorporeal circulation.				
Week X	Etiopathogenesis, classification, and staging of malignant diseases.				
Week XI	Specific features of pediatric surgery, symptomatology and diagnostics of diseases and injuries during childhood.				
Week XII	Definition, types, and methods of organ and tissue transplantation; transplantation from living donors; organization and medicolegal aspects of organ transplantation. Specific features of care in organ transplantation.				
Week XIII	Concept of anesthesia and resuscitation, preparation of the patient for surgical treatment, types of anesthesia and monitoring of the surgical patient, and management of the patient in the postoperative period.				
Week XIV	Principles and organization of work in the operating room.				
Week XV	Principles of semi-intensive and intensive care of surgical patients (basics).				
Methods of teaching: Lectures using various video materials, exercises, case analysis, model-based practice, and e-learning.					
Student workload:					
weekly: 7			per semester: 105		

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Maksimović Ž.: Hirurgija, udžbenik za studente, CIBID, Beograd, 2008
2. Petković S., Bukurov S.: Hirurgija, udžbenik za medicinare i lijekare, Medicinska knjiga, Beograd-Zagreb, 2015

Recommended Literature:
3. Stevović D. i sar.: Hirurgija, udžbenik, Savremena administracija, 2011
4. Domazet N.: Hirurgija sa ortopedijom i traumatologijom, udžbenik, Beograd, 2015
5. Terzić N.: Zdravstvena njega u hirurgiji, udžbenik, autorsko izdanje, Lazarevac, 2006
6. Norton J., Barie P. S., Bollinger R. R., Chang A. E., Lowry S., Mulvihill S. J., Pass H. I., Thompson R. W.: Surgery- Basic Science and Clinical Evidence, Springer Publishing Company, New York, 2008
7. Scher L. A., Weinberg G.: General Surgery, LWW, Liverpool, 2011
8. Pudner R.: Nursing the Surgical Patient, Elsevier, London, 2015

Course outcome (aligned with the study program outcomes):
Students are trained to practically apply the acquired knowledge from all surgical disciplines necessary for the acquisition of skills in the care of surgical patients, which includes previous mastering of practical knowledge and acquiring skills necessary for the care of surgical patients.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Igor Kumburović, PhD, Professional Studies Professor, Specialist in Surgery Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics
Teaching Associate:	Zlata Janjić, MD, Teaching Associate, Specialist in Plastic and Reconstructive Surgery Igor Kumburović, PhD, Professional Studies Professor, Specialist in Surgery

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BIOLOGICAL MATERIALS AND LABORATORY TECHNIQUES

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Biological Materials and Laboratory Techniques					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-02-c	elective	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Familiarization of students with the tasks of the laboratory in clinical diagnostics, familiarization with different biological materials, their extraction, adequate transportation and storage, laboratory result testing in clinical practice.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	The notion of medical-biochemistry laboratory, clinical chemistry, clinical biochemistry, laboratory medicine, laboratory diagnostics.				
Week II	Biological materials, their importance and adequate measures in sample collection, storage and transportation.				
Week III	The notion of preanalytics.				
Week IV	Organization of the provision of laboratory services at primary, secondary and tertiary level.				
Week V	Capillary puncture and phlebotomy in standard conditions. Plood draw procedure. Anticoagulants – different coagulants and other additives used in sample preparation.				
Week VI	Preanalytical variables, the importance of adequate preparation of the patient and the impact of preanalytical variables on the quality of biological material.				
Week VII	The impact of climate on the results of analysis. The impact of medicines on the analysis.				
Week VIII	Methods for identifying improper sample preparation or false results. Result control.				
Week IX	Sample collection from a bedridden patient. Field sample collection				
Week X	Inaccurate results, improper storage or transport of samples – examples from practice.				
Week XI	Basics of interpreting medical biochemical analysis results.				
Week XII	Basic laboratory procedures.				
Week XIII	Sound laboratory practice, GMP standard.				
Week XIV	Specific features of sampling of certain categories of patients. Specific characteristics of sampling certain types of biological materials. Work with potentially contagious patients. Work during an epidemic.				
Week XV	Ethics and data protection.				

Methods of teaching:
Lectures using various video materials, exercises, case analysis, discussion, and clinical practice.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:

1. Ubavić M.: Interpretacija najčešćih laboratorijskih analiza i uticaj lekova na njih, udžbenik, Omega MS Pharmacy, Novi Sad, 2017

Recommended Literature:

2. Kladnik J. B.: Farmakologija, udžbenik, Visoka zdravstvena škola u Mariboru, Maribor, 2006
3. Morrow A. S.: Diagnostic and Therapeutic Technic: A Manual of Practical Procedures Employed in Diagnosis and Treatment, Forgotten Books, London, 2019
4. Shankara S.: Laboratory Manual for Practical Biochemistry, Jaypee Brothers, New Delhi, 2018
5. Guder W. G.: Samples from the patients to the laboratory - the impact of preanalytical variables on the quality of laboratory results, GIT Verlag, Darmschtate, 2011
6. Senger R. S.: Laboratory Manual of Biochemistry: Methods and Techniques, NIPA, London, 2014
7. Marshall W. J., Bangert S. K.: Clinical Chemistry, Mosby, Edinburgh, 2004

Course outcome (aligned with the study program outcomes):
Upon completion of the course, the student will acquire fundamental knowledge of work in a medical biochemistry laboratory, its operational capabilities, and, above all, the types of biological materials, methods of preparing patients for sample collection, proper sampling procedures (pre-analytical variables), methods of sample storage, transport, and processing, the impact of medications on the accuracy of sampling, as well as the basics of interpreting medical biochemical analysis results.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Gordana Švonja Parezanović, PhD, Professional Studies Professor
Teaching Associate:	Gordana Švonja Parezanović, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BIOPHYSICS WITH BIOMECHANICS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Biophysics with Biomechanics					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-02-b	elective	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Acquisition of fundamental theoretic and practical knowledge in biophysics required for subsequent easier understanding of biomechanical system of human organism and application of the knowledge on physiotherapy and medical rehabilitation of various disorders and conditions; familiarization with laws of physics of importance for physiotherapy.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Biotransport. Membrane potential. Biophysics of sensory functions.				
Week II	Basics laws of biomechanics and dynamics. Principal rules of biomechanics.				
Week III	Elements of human locomotor system, levers.				
Week IV	Biomechanical aspects of osteogenesis and mechanical model of bone form adaptation.				
Week V	Intermolecular forces.				
Week VI	Elasticity at stretching and bending.				
Week VII	Energy aspects of bone fracture.				
Week VIII	Impulse force.				
Week IX	Characteristics of ultra sound, sources of ultra sound.				
Week X	X-ray techniques.				
Week XI	Electrophysiology, examples of modelling in electrophysiology.				
Week XII	Alternate current passage through organism.				
Week XIII	Physical basics of diametry.				
Week XIV	Diathermy-based methods.				
Week XV	Laser, laser in medicine.				
Methods of teaching: Lectures using various video materials, exercises, case analysis, discussion, and clinical practice.					
Student workload:					
weekly: 4				per semester: 60	
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature

1. Simonović J., Vuković J., Ristanović D., Radovanov R., Popov D.: Biofizika u medicini, udžbenik, Medicinska knjiga, 2013
2. Vasiljev R.: Biomehanika: dinamička morfologija, položaj tijela u prostoru, uslovi ravnoteže, Novi Sad, 2015

Recommended Literature:

3. Grupa autora, Praktikum iz biofizike u medicini, Nauka, 2009

Course outcome (aligned with the study program outcomes):

Familiarization with biophysical basics of mechanics of certain organisms by applying computing methods in biomechanics and understanding laws of biomechanics and their application to complex systems of organisms.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Maja Stojanović, PhD, Professional Studies Professor Živko Avramov, PhD, Professional Studies Professor
Teaching Associate:	Maja Stojanović, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

BUSINESS COMMUNICATION SKILLS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Business Communication Skills					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-01-a	elective	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Through active participation in the learning process, the student should acquire knowledge in the field of communication, with the aim of developing communicative competence and the necessary skills for professional work in the care and treatment of older adults, organizational and team communication, and communication with social partners.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	General notions, aspects, types, parts of communication. Communication competency in professional work. Barriers to communication.				
Week II	Specifics of communication with older adults. The importance of verbal and nonverbal communication with older adults.				
Week III	Specifics of applying health-educational communication methods with older adults. Communication and health-educational counseling — supportive methods.				
Week IV	Establishing first contact and conducting conversations with patients. Specifics of communication with individuals with sensory-perceptual impairments.				
Week V	Ethics in communication. Political and social correctness in communication.				
Week VI	Professional identity and communication. Communication styles.				
Week VII	Emotional communication, empathy. Communication in the function of social support.				
Week VIII	Communication and psychological distress in elderly care and palliative care. Therapeutic and informational communication.				
Week IX	Psychological and social aspects of communication.				
Week X	Communication with people under stress and in crisis. Communication with people with reduced sensory and speech abilities.				
Week XI	Communication with the families of elderly people. Communication in grief.				
Week XII	Interpersonal communication. Teamwork and social partners.				
Week XIII	Public relations of an organization aimed at achieving mutual understanding and realizing common interests.				
Week XIV	Communication in crisis situations.				
Week XV	Conflict management and resolution.				
Methods of teaching: Lectures, exercises, small-group work, methodological exercises, seminar papers, presentations to the group, and student practical activity methods.					

Student workload:	
weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:

1. Kekuš D.: Komunikacije u profesionalnoj praksi zdravstvenih radnika, coursebook, Beograd, 2010

Recommended Literature:

2. Kekuš D.: Modeli integrisanih komunikacija u zdravstvu, coursebook, Fakultet organizacionih nauka, Beograd u, 2009
3. Guffey M. E., Loewy D.: Business Communication: Process and Product, Cengage Learning, Boston, 2014
4. Hugman B.: Healthcare Communication, Pharmaceutical Press, London, 2009

Course outcome (aligned with the study program outcomes):
At the end of the course, the student should be able to apply the acquired knowledge of communication skills and practically implement the acquired knowledge and skills within nursing care.

Forms of knowledge assessment and grading:

pre-exam requirements	**points**	**exam**	**points**
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:	
Lecturer:	Srđan Stojanović, PhD, Professional Studies Professor Darko Tadić, PhD, Professional Studies Professor
Teaching Associate:	Dijana Kukuličić, Teaching Associate, Specialist Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

BUSINESS ENGLISH

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Business English					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-05-d	elective	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Course objective is familiarization with characteristics of the English language, adoption of phrases and patterns necessary for communication at professional level and adoption of techniques of written and oral expressing in professional communication.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Broadening of knowledge on past tenses, dependent and relative clauses				
Week II	Broadening of knowledge on past tenses, dependent and relative clauses				
Week III	Broadening of knowledge on future tenses, dependent and relative clauses				
Week IV	Temporal conjunctions.				
Week V	Temporal clause structure.				
Week VI	Text processing: Business meetings, business correspondence, codes of conduct.				
Week VII	Text processing: Email, written communication.				
Week VIII	Text processing: Basics of financial terminology.				
Week IX	Text processing: Basics of terminology related to receptions, cocktails, ceremonies, and award presentations.				
Week X	Text processing: Project documentation, ROI analysis.				
Week XI	Text processing: Business lunch, gala dinner, cocktail reception.				
Week XII	Text processing: Environmental protection and business life in English-speaking countries.				
Week XIII	Text processing: Hotel, airport, taxi, business trip, conference.				
Week XIV	Text processing: Different nationalities, differences among people.				
Week XV	Text processing: Communication with the media.				
Methods of teaching: Lectures, practical exercises, communication activities, and e-learning.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature

1. Evans V., Dooley J., Tran T. M.: Career Paths, Medical Book 1, udžbenik, Express Publishing, Berkshire, 2012
2. Dragović R.: Engleski za zdravstvene radnike, udžbenik, Naučna knjiga, Beograd, 2014
3. Momčinović V., Tanay V., Žurić-Havelka S.: Medical English, udžbenik, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2008
4. Murphy R.: English Grammar in Use, Cambridge University Press, Cambridge, 2008
5. McCarthy M., O'Dell F.: English Vocabulary in Use, Cambridge University Press, Cambridge, 2006

Dopunska literatura:

6. Hornby A. S.: Oxford Advanced Learner's Dictionary of Current English, Oxford University Pres, Oxford, 2008
7. MacLean J.: English in Basic Medical Science, Oxford University Press, Oxford, 2010

Course outcome (aligned with the study program outcomes):

Students will be able to apply the acquired knowledge in professional communication, create corresponding written forms in accordance with their professional communication and use speech patterns appropriate to a given situation.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Irena Petrušić, PhD, Professional Studies Professor
Teaching Associate:	Irena Petrušić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

DEGREE PAPER

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Degree Paper					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-22	mandatory	third	10	lectures	0
				exercises	0
				other forms of active classes	300
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: All courses from Years I–III passed					
Course objective: The objective is to train students to apply basic, academic general-education, specialist and specialist-applicative knowledge and methods in solving specific issues within Degree Paper topic. Within the Degree Paper, students, examining the available literature or through work in a health care institution or laboratory, or by statistical data analysis, deal with an issue, its structure and complexity and on the basis of the analyses made draw conclusions on possible ways of its solving. Students are also trained in writing the Degree Paper, presenting it within the set deadline and discuss the Paper with specialists in the relevant area.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
During 300 hours	The Degree Paper represents a professional or research paper in which the student becomes acquainted with research methodology in all areas of importance to healthcare. The Degree Paper topic may be experimental or bibliographic. After completing the research, the student prepares the Degree Paper in a format that includes the following sections: Introduction, Theoretical Background, Methodology, Results and Discussion, Conclusion, Abbreviations (optional), Appendices (optional), References, Candidate's Biography, Key Documentation Information. The thesis defense consists of an oral presentation of the thesis by the student, questions posed by the members of the committee, and the student's responses to those questions.				
Methods of teaching: During the preparation of the Final Thesis, the mentor provides the student with the necessary guidance, directs them to relevant literature, assists in the selection of research methods, supports the analysis and processing of the obtained results, and helps in drawing appropriate conclusions, among other tasks. Within this part of the Final Thesis, the student conducts additional consultations with the mentor and, if necessary, with other instructors who specialize in issues related to the topic of the Final Thesis. If the medical work is conducted in a health care institution, the consent of the medical institution is required.					
Student workload:					
weekly: 20 (formal)			per semester: 300		
Student obligations during the course: Consultations with the mentor, electronic literature search, thesis writing.					
Literature: As agreed with the mentor.					

<table>
<tr><td colspan="4">Course outcome (aligned with the study program outcomes):
The student is qualified, based on the knowledge and skills acquired during the course of study, to carry out work in a healthcare institution or laboratory, or to collect relevant professional literature, prepare a written paper, and present it before a competent committee.</td></tr>
<tr><td colspan="4">Forms of knowledge assessment and grading:</td></tr>
<tr><td>pre-exam requirements</td><td>points</td><td>exam</td><td>points</td></tr>
<tr><td>Preparation of the thesis in written form.</td><td>20</td><td>Responses to questions posed by the three members of the Final Thesis Defense Committee during the thesis defense</td><td>30 points (3 × 10 points awarded by the three members)</td></tr>
<tr><td>Degree Paper subject matter</td><td>30</td><td>-</td><td>-</td></tr>
<tr><td>Presentation of the thesis during the Degree Paper defense.</td><td>20</td><td>-</td><td>-</td></tr>
<tr><td colspan="4">Full name of the lecturers and teaching associates:</td></tr>
<tr><td>Lecturer:</td><td colspan="3">mentor</td></tr>
<tr><td>Teaching Associate:</td><td colspan="3">mentor</td></tr>
<tr><td colspan="4">Specific features that need to be emphasized for the course:
no</td></tr>
<tr><td colspan="4">Note (if applicable):
no</td></tr>
</table>

DIAGNOSTICALLY-THERAPEUTIC PROGRAM

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Diagnostically-Therapeutic Program

Course Code	Course Status	Year	Number of ECTS	Number of classes	
znj-16	mandatory	second	5	lectures	30
				exercises	45
				other forms of active classes	0
				professional practice	150

Study programs for which it is organized:
Bachelor of Applied Studies in Nursing

Prerequisites:
Pathophysiology

Course objective:
Familiarization of students with diagnostic and therapeutic procedures used in the daily operations of a medical-biochemical laboratory in clinical diagnostics with various biological materials, their proper use, extraction, transport, and storage; methods of testing in clinical practice, as well as the basic concepts related to conducting analysis, potential (significant) variations in laboratory test results influenced by a range of external factors, interpretation of results, and the importance of implementing GLP (Good Laboratory Practice) and the ISO 17025 and ISO 15189:2014 standards. Through this course, students will be guided through patient preparation, the sampling procedure, explanation of the analysis itself, as well as a series of factors that can influence the obtained values of the analysis.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	The notion of a medical-biochemical laboratory, laboratory medicine, preanalytics, laboratory diagnostics.
Week II	Biological materials, their importance and adequate measures in sample collection, storage and transportation.
Week III	The importance of proper patient preparation and the impact of preanalytical variables on the quality of biological material
Week IV	Types of patient preparation.
Week V	Patient preparation and sampling procedure.
Week VI	Quality control of the collected sample.
Week VII	Related analyses, related conditions, analysis methods.
Week VIII	Explanation of analysis.
Week IX	Reference values.
Week X	Lowered and elevated serum concentration values.
Week XI	False decreased and false increased values.
Week XII	Impact of medications (with listed generic drug names that affect laboratory values in terms of decreasing or increasing values).

Week XIII	Analysis: Aacidum uricum (uric acid), Activated partial thromboplastin time (APTT), Alanine aminotransferase (ALT) or Serum glutamate-pyruvate transaminase (SGPT), Albumin, Alpha-amylase in serum, Alpha-amylase in urine, Alpha-fetoprotein (AFP), Alkaline phosphatase (ALP), Anti-thyroglobulin antibodies (Anti-Tg-At), Anti-thyroid peroxidase antibodies (Anti-TPO-At), Aspartate aminotransferase (AST) or Serum glutamate-oxaloacetate transaminase (SGOT), Bilirubin (total and direct), C-peptide, C-reactive protein (CRP), Dehydroepiandrosterone sulfate (DHEA-S), Erythrocytes (Er), Estradiol (E2), Fibrinogen, Folliclestimulating hormone (FSH), Inorganic phosphates (P).
Week XIV	Analysis: Glycated hemoglobin (HbA1c), Glucose (blood sugar), Gamma-glutamyl transferase (gamma-GT, GGT), Gamma-glutamyl transpeptidase (GGTP), Iron (Fe), HDL cholesterol (HDL-H), Hemoglobin (Hb), Chlorides (Cl), Cholesterol, Cholinesterase (HE), Growth hormone (GH), Human chorionic gonadotropin (hCG), Immunoglobulin A (IgA), Immunoglobulin E (IgE), Immunoglobulin G (IgG), Immunoglobulin M (IgM), Insulin, Calcium (Ca), Potassium (K), Carcinoma antigen 15-3 (CA 15-3), Carcinoma antigen 19-9 (CA 19-9), Carcinoma antigen 125 (CA 125), Carcinoembryonic antigen (CEA), Acid phosphatase (AcP), Prostatic acid phosphatase (AcP-P), Cortisol, Creatinine, Creatine kinase (CK), Creatine kinase-MB (CK-MB), Lactate dehydrogenase (LDH), Leukocytes (Le)
Week XV	Analysis: Luteinizing hormone (LH), Magnesium (Mg), Sodium (Na), Parathyroid hormone (PTH), Progesterone (Ps), Prolactin (PRL), Prostate-specific antigen (PSA), Total proteins, Prothrombin time (PT), Free thyroxine (FT4), Free triiodothyronine (FT3), Testosterone, Thyroxine (T4), Triglycerides, Triiodothyronine (T3), Total iron-binding capacity (TIBC and UIBC), Platelets (Tr), High-sensitivity C-reactive protein (hsCRP), High-sensitivity thyroid-stimulating hormone (hcTSH), Urea, Urine.

Methods of teaching:
lectures using various video materials, exercises, case analysis, discussion, and clinical practice.

Student workload:

weekly: 5	per semester: 75

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:

1. Ubavić M.: Interpretacija najčešćih laboratorijskih analiza i uticaj lekova na njih, udžbenik, Omega MS Pharmacy, Novi Sad, 2017

Recommended Literature:

2. Kladnik J. B.: Farmakologija, udžbenik, Visoka zdravstvena škola u Mariboru, Maribor, 2006
3. Morrow A. S.: Diagnostic and Therapeutic Technic: A Manual of Practical Procedures Employed in Diagnosis and Treatment, Forgotten Books, London, 2019
4. Shankara S.: Laboratory Manual for Practical Biochemistry, Jaypee Brothers, New Delhi, 2018
5. Guder W. G.: Samples from the patients to the laboratory - the impact of preanalytical variables on the quality of laboratory results, GIT Verlag, Darmschtate, 2011
6. Senger R. S.: Laboratory Manual of Biochemistry: Methods and Techniques, NIPA, London, 2014
7. Marshall W. J., Bangert S. K.: Clinical Chemistry, Mosby, Edinburgh, 2004

Course outcome (aligned with the study program outcomes):
Upon completion of the course, the student will acquire fundamental knowledge of work in a medical biochemistry laboratory, its operational capabilities, and, above all, the types of biological materials, methods of preparing patients for sample collection, proper sampling procedures (pre-analytical variables), methods of sample storage, transport, and processing, the impact of medications on the accuracy of sampling, as well as the basics of interpreting medical biochemical analysis results.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Milan Ubavić, PhD, Professional Studies Professor, Specialist in Pathophysiology
Teaching Associate:	Jasmina Birta, Teaching Associate, Professional Medical Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

EMERGENCY MEDICINE AND NURSING IN SPECIAL CONDITIONS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Emergency Medicine and Nursing in Special Conditions					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-20	mandatory	third	7	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	270
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: Basics of Nursing					
Course objective: Students are introduced to prehospital and initial in-hospital organization and management of emergency and critical medical conditions, as well as basic and advanced cardiopulmonary resuscitation measures. It is necessary to familiarize students with the stages of determining and managing sudden death, not only in relation to the victim of sudden death but also those who remain alive, including the positive impact on friends and family members. Mastery of skills for the practical application of acquired knowledge. Development of critical thinking.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Principles of emergency medicine. Assessment of vital functions. Pain as the fifth vital sign. Assessment, maintenance, and securing of the airway. Artificial ventilation.				
Week II	Acute chest pain (evaluation and management). Acute coronary syndromes. Cardiogenic shock. Syncope.				
Week III	Urgent conditions in vascular medicine (dissection, rupture, acute occlusions, deep vein thrombosis, embolisms). Peri-arrest arrhythmias (tachyarrhythmias, bradyarrhythmias).				
Week IV	Hypertensive emergencies. Acute cardiac arrest. Basic and advanced cardiopulmonary resuscitation measures in adults and children.				
Week V	Death — stages of determining sudden death, communication with the family.				
Week VI	Medicolegal aspects of emergency medicine. Acute peripheral arterial ischemia.				
Week VII	Acute active bleeding. Hypovolemic shock. Volume resuscitation. Anaphylactic shock. Respiratory failure.				
Week VIII	Acute asphyxia (recognition signs, initial management). Acute abdominal pain (evaluation, differential diagnosis, and initial management).				
Week IX	Acute intracranial/spinal compression. Acute intestinal obstruction.				
Week X	Acute urinary obstruction. Epilepsy and seizures. Delirium and acute confusional states.				
Week XI	Acute headache. Ischemic stroke. Transient ischemic attack (TIA).				
Week XII	Subarachnoid hemorrhage. Elevated body temperature in children. Dehydrated child.				
Week XIII	Trauma — severe isolated and severe multiple trauma.				
Week XIV	Prehospital primary examination (ABCDE principle) and stabilization at injury infliction site.				

Week XV	Prehospital care during transport. Initial hospital care. Acute poisoning.

Methods of teaching:
Lectures, exercises, case analysis, discussion, e-learning, and clinical practice.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature

1. Kalezić N. i sar.: Inicijalni tretman urgentnih stanja u medicini, udžbenik, Medicinski fakultet, Beograd, 2016
2. Lott C. i sar.: Advaced life support course manual, European resuscitation council, ERC guidelines, Brussel, 2015

Recommended Literature:

3. Vučović D.: Urgentna medicina, udžbenik, udžbenik, Obeležja, Beograd, 2012
4. Pavlović A.: Kardiopulmonalno cerebralna reanimacija, Obeležja, Beograd, 2014
5. Newton C. R. H., Khare R. K.: Urgentna medicina, Besjeda, Banja Luka, 2007
6. Biros M. H., Sterner S., Vogel E. C.: Handbook of Urgent Care Medicine, Hanley & Belfus, London, 2012
7. Sherman S. C., Weber J. W., Schindlbeck M., Patwari R.: Clinical Emjergency Medicine (Lange Medical Books), McGraw-Hill Education, London, 2014
8. Shufeldt J., Resnick L., Davidoff T. Q.: Textbook of Urgent Care Medicine, Urgent Care Textbooks, Munchen, 2014
9. Cline D. M., Ma O. J., Cydulka R. K., Meckler G. D., Thomas S. H., Handel D.: Emjergency Medicine Manual, McGraw-Hill Education, London, 2012

Course outcome (aligned with the study program outcomes):
Introducing students to prehospital and initial in-hospital management of critical and urgent medical conditions. Introducing students to errors that may occur during management in emergency medical practice. Physicians' obligations in the event of sudden death. Use of medications and advanced technologies in emergency medicine and their potential application in scientific and research work. Mastery of basic and advanced cardiopulmonary resuscitation measures (adults and children), as well as basic and advanced measures and procedures in the management of injured patients (adults and children). Skills acquisition is carried out using mannequins and patients, as well as through presentations of potential clinical cases with questions, answers, and discussions.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Brane Gavrančić, PhD, Professional Studies Professor Milana Mitrić Ašković, PhD, Professional Studies Professor, Specialist in Radiation Oncology
Teaching Associate:	Zlatko Ćirić, Teaching Associate, Master of Healthcare Organization Brane Gavrančić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

ETHICS IN HEALTH CARE

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Ethics in Health Care					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-03	mandatory	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Acquisition of basics of applied medicine ethics, understanding practical importance of ethics and recognizing differences between ethical and legal issues, development of critical thinking in the process of ethical analysis, understanding national, European and international legal regulations, knowing rights and responsibilities in health protection, health insurance, as well as knowing rights and responsibilities of providers of medical services, their beneficiaries and of the third party.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Normative ethics in medicine.				
Week II	Ethical principles of importance for health care professionals.				
Week III	Theories of medical ethics.				
Week IV	Ethical norms in medical practice.				
Week V	Ethical case studies in health care practice, moral values, misjudgment.				
Week VI	Mistakes in practice, moral and criminal liability of health care professionals.				
Week VII	Ethical judgement in observance of moral values and rights of patients.				
Week VIII	Nonobservance of codified principles.				
Week IX	Ethics in preclinical and clinical studies (basics).				
Week X	Ethics committee.				
Week XI	European and international regulations.				
Week XII	National health care policy.				
Week XIII	Serbian Medical Chamber.				
Week XIV	Medical license.				
Week XV	Court of honor.				
Methods of teaching: lectures, workshops, analysis of practical case studies, problem-based learning, and exercises.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Marić J.: Medicinska etika, Data Status, Beograd, 2005

Recommended Literature:

2. Lazarević A.: Socijalna medicina, autorsko izdanje, 2005
3. Grujić V., Martinov Cvejin M., Legetić B.: Socijalna medicina, udžbenik, Medicinski fakultet, Novi Sad, 2011
4. Aktuelni zakoni i podzakonska akta Republike Crne Gore iz oblasti zdravstva
5. Hope T.: Medical Ethics, OUP Oxford, Oxford, 2004
6. Fregmen B. F.: Medical Law and Ethics, Prentice Hall, New Jersey, 2011
7. Herring J.: Medical Law and Ethics, Oxford University Press, Oxford, 2020

Course outcome (aligned with the study program outcomes):

After passing the exam, students will be able to critically think on normative and ethical principles, they will know the difference between legal and ethical issues, be able to make critical judgements at provision of health care services if they include moral duties and will be able to understand laws regulating aspects of health care activities, rights and responsibilities of health care professionals, patients and the third party.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Zorica Živković, PhD, Professional Studies Professor, specialist in surgery Slavica Konević, PhD, Professional Studies Professor
Teaching Associate:	Zorica Živković, PhD, Professional Studies Professor, specialist in surgery Katarina Pešić, Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

FIRST AID

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: First Aid					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-13	mandatory	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: The basic objectives of first aid education are to familiarize students with the principles of initial care of suddenly injured or ill persons, to develop skills for the practical application of acquired knowledge, to provide immediate care aimed at preserving the life of the injured person, other people, and the environment, and to improve protection against further injuries and hazards.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Examination and triage of the injured.				
Week II	Evacuation of the injured (taking out, carrying out and transport). Assessment of vital functions and state of consciousness.				
Week III	Airway opening and keeping.				
Week IV	Bolus obstruction – partial, total, procedure algorithm in adults and children.				
Week V	Artificial respiration – expiratory airflow.				
Week VI	Appropriate positions for suddenly injured or ill persons (lateral recovery position, semi-lateral, prone, semi-recumbent, semi-sitting, sitting, knee–elbow position, kneeling position, autotransfusion position).				
Week VII	Sudden cardiac arrest – recognition and basic life support measures in adults and children.				
Week VIII	Use of automated external defibrillators (AEDs). Procedure algorithm – basic resuscitation measures in adults and children.				
Week IX	Bleeding – identification and procedures in external and internal bleeding. Traumatic amputation care procedure.				
Week X	Open injuries (wounds) – care. Bone and joint system injuries (notion, types).				
Week XI	Temporary immobilization. Head and vertebral column injuries.				
Week XII	Thoracic rib and stomach injuries. Care procedures. Complications and prevention of their occurrence.				
Week XIII	Thermal and electrical injuries and their management.				
Week XIV	Cold-related injuries and their management.				
Week XV	Specific injuries, diseases and conditions, care.				
Methods of teaching: Lectures, exercises, case analysis, e-learning, model-based practice, and visits by accredited professionals.					
Student workload:					
weekly: 4			per semester: 30		

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature

1. Pavlović A.: Prva pomoć, coursebook, Obeležja, Beograd, 2007

Recommended Literature:

2. Pavlović A.: Kardiopulmonalna reanimacija, Obeležja, Beograd, 2007
3. Maroco D.: First Aid Book, CreateSpace Independent Publishing Platform, Roterdam, 2016
4. Piazza G. M.: First Aid Manual, DK, London, 2014
5. Williamson S. N., Goswami M.: First-Aid and Emjergency Care, Kumar Publishing House, Roterdam, 2014
6. Saubers N.: First Aid Book, Everything, London, 2008

Course outcome (aligned with the study program outcomes):
Familiarization of students with the forms of sudden ailments and injuries and methods of prompt and immediate care. Skills in examination and prompt recognition of signs and symptoms in sick or injured persons requiring immediate and urgent care.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Brane Gavrančić, PhD, Professional Studies Professor
Teaching Associate:	Brane Gavrančić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

GERIATRICS WITH NURSING IN GERIATRICS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Geriatrics with Nursing in Geriatrics					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-04	mandatory	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	210
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Students will acquire knowledge and skills in nursing of senior citizens, understand their bodily, social and psychological needs and problems, be familiar with the possibilities of taking care of them in institution or at their home.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	The notion of gerontology and geriatrics. Physical, psychological and social aspect of getting old. Recognition of problems of the elderly.				
Week II	Theories of getting old, specific features of defining getting old, health issues, old-age illnesses, prevention of complications, treatment, nursing and rehabilitation.				
Week III	Care categorization, therapeutic procedure, specific features of communication.				
Week IV	Most frequent health issues of the elderly, their prevention and treatment.				
Week V	The role of nurse in health protection and nursing of the elderly.				
Week VI	Specific features of nursing in senior citizen institutions and geriatric centers.				
Week VII	Specific features of medical rehabilitation of old persons. Institutions taking care of the elderly.				
Week VIII	Direction of geriatrics development in the EU. Importance of psychical rehabilitation of the elderly.				
Week IX	Everyday life activities. Psychophysical activity, elimination of the feeling of being deserted.				
Week X	Team activities, past time activity organization, artistic and sports activities.				
Week XI	Care of local community for improvement of life of senior citizens (associations, day centers).				
Week XII	Gerontology centers, work organization, activities within centers. Work in gerontology centers in Serbia and EU countries.				
Week XIII	Importance of prevention. Palliative care and work with families.				
Week XIV	Education of population in volunteering.				
Week XV	Familiarization with social protection of old persons.				
Methods of teaching: lectures using various video materials, exercises, workshops, clinical practice, visits of teaching base employees.					
Student workload:					
weekly: 4			per semester: 60		

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:

Required Literature:

1. Vukadinov J.: Gerijatrija i njega starih osoba, udžbenik, Medicinski fakultet, Novi Sad, 2006
2. Šarenac D.: Zdravstvena njega starih, udžbenik, Licej, Beograd, 2009

Recommended Literature:

3. Dujaković Z. i sar.: Gerijatrija - medicina starije dobi, udžbenik, Medicinska naklada, Zagreb, 2008
4. Stavljenić – Rukavina A., Mitermayer R. R., Roksandić T. S., Mustajbegović J.: Kvaliteta dugotrajne skrbi starijih osoba, Centar za gerontolgiju, Referentni centar Ministarstva zdravlja RH za zaštitu zdravlja starijih osoba, priručnik, Zagreb, 2012
5. Popović -Pejičić S.: Hipotalamus-hipofiza-štitnjača i starenje, Medicinski fakultet, Banj a Luka, 2005
6. Boltz. M.: Evidence-Based Geriatric Nursing Protocols for Best Practice, Springer Publishing Company, New York, 2012
7. Nair B. K.: Geriatric Medicine, Springer Singapore, Singapore, 2018
8. Chernoff R.: Geriatric Nutrition: The Health Professional's Handbook , Jones & Bartlett Learning, London, 2006
9. Taylor R.: Oxford Handbook of Palliative Care, Oxford University Press, Oxford, 2009
10. Kasper D., Fauci A., Hauser S., Longo D.: Harrison's Principles of Internal Medicine, McGraw-Hill Professional, New York, 2015

Course outcome (aligned with the study program outcomes):
Upon the course completion student should be able to recognize specific problems of the elderly, evaluate their functional abilities and possibilities of self-care, train them in self-care and treatment in senior citizens institutions and geriatric hospitals.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Olivera Đurović, PhD, Professional Studies Professor Milica Živaljević, PhD, Professional Studies Professor, Specialist in Oncology
Teaching Associate:	Damir Adrović, MD, Teaching Associate Danijela Simić, Teaching Associate, Specialist Professional Nurse Dijana Kukulić, Teaching Associate, Specialist Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

PHARMACOLOGY AND DRUG DOSING

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Pharmacology and Drug Dosing					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-04-b	elective	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: To provide the student with: knowledge of the mechanisms of action of medications, information necessary for understanding the various effects of medications, understanding of the therapeutic and adverse effects of specific groups of medications, and knowledge of the principles of therapeutic use of medications.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Introduction. History of pharmacology. Pharmacology division. Pharmacology division. General principles and drug development. Classification of medications.				
Week II	General principles and drug development. Dosing. LADMER (liberation, absorption, distribution, metabolism, elimination and response of organism to administered drug).				
Week III	Effects of drugs on organism. Type and character of drug effects. Drug effect mechanisms.				
Week IV	Drug effect mechanisms. Changes in drug effects with repeated administration. Drug–drug interactions.				
Week V	Adverse effects of medications. Drug dependence.				
Week VI	Fundamentals of clinical pharmacology. Nonsteroidal anti-inflammatory drugs (NSAIDs). Disease-modifying antirheumatic drugs (DMARDs).				
Week VII	Pharmacology of the blood: anticoagulant and coagulant drugs, antiplatelet drugs, local and systemic hemostatic agents.				
Week VIII	Antianemic drugs.				
Week IX	Water and electrolytes: Fluid replacement agents.				
Week X	Drugs for parenteral nutrition. Pharmacology of the respiratory tract. Pharmacology of the cardiovascular system.				
Week XI	Drugs and therapy for peripheral vascular diseases. Antilipemic agents. Pharmacology of the digestive tract. Immunosuppressants and immunostimulants.				
Week XII	Pharmacology of vitamins. Drugs for the treatment of obesity. Pharmacology of hormones.				
Week XIII	Pharmacology of antimicrobial drugs. Antifungal drugs. Antiviral drugs. Amebicidal drugs. Antimalarial drugs. Antiparasitic drugs.				

Week XIV	Antiseptics and disinfectants.
Week XV	Chemotherapy of malignant diseases.

Methods of teaching:
lectures, exercises, video presentations, demonstrations, workshop, and analysis of practical case studies.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature
1. Đaković Švajcer K.: Osnovi farmakologije, udžbenik, Ortomedics, Novi Sad, 2010
2. Varagić V., Milošević M.: Farmakologija, udžbenik, Elit Medica, Beograd, 2005

Recommended Literature:
3. Rang H. P., Dale M. M., Ritter J. M., Moore P. K.: Farmakologija, udžbenik, Data Status, Beograd, 2004
4. Jakovljević V., Sabo A., Tomić Z. (ured.), Stević S. i sar.: Ljekovi u prometu 2009, priručnik o ljekovima i njihovoj primjeni, ATC klasifikacija, Novi Sad, Beograd, Niš, Kosovska Mitrovica, Podgorica, Ortomedics, Novi Sad, 2007, 2009
5. Bukarica-Gojković Lj. i sar.: Praktikum iz farmakologije, Medicinski fakultet, Beograd, 2009

Course outcome (aligned with the study program outcomes):
Upon completion of the course, the student is expected to be able to: identify the mechanisms underlying the different effects of specific groups of medications, relate the therapeutic and adverse effects of these medication groups to their various pharmacological actions, and develop an independent critical approach to medications.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Gordana Švonja Parezanović, PhD, Professional Studies Professor
Teaching Associate:	Gordana Švonja Parezanović, PhD, Professional Studies Professor Jasmina Birta Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

GERIATRICS WITH NURSING IN GERIATRICS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Geriatrics with Nursing in Geriatrics					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-04	mandatory	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	210
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Students will acquire knowledge and skills in nursing of senior citizens, understand their bodily, social and psychological needs and problems, be familiar with the possibilities of taking care of them in institution or at their home.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	The notion of gerontology and geriatrics. Physical, psychological and social aspect of getting old. Recognition of problems of the elderly.				
Week II	Theories of getting old, specific features of defining getting old, health issues, old-age illnesses, prevention of complications, treatment, nursing and rehabilitation.				
Week III	Care categorization, therapeutic procedure, specific features of communication.				
Week IV	Most frequent health issues of the elderly, their prevention and treatment.				
Week V	The role of nurse in health protection and nursing of the elderly.				
Week VI	Specific features of nursing in senior citizen institutions and geriatric centers.				
Week VII	Specific features of medical rehabilitation of old persons. Institutions taking care of the elderly.				
Week VIII	Direction of geriatrics development in the EU. Importance of psychical rehabilitation of the elderly.				
Week IX	Everyday life activities. Psychophysical activity, elimination of the feeling of being deserted.				
Week X	Team activities, past time activity organization, artistic and sports activities.				
Week XI	Care of local community for improvement of life of senior citizens (associations, day centers).				
Week XII	Gerontology centers, work organization, activities within centers. Work in gerontology centers in Serbia and EU countries.				
Week XIII	Importance of prevention. Palliative care and work with families.				
Week XIV	Education of population in volunteering.				
Week XV	Familiarization with social protection of old persons.				
Methods of teaching: lectures using various video materials, exercises, workshops, clinical practice, visits of teaching base employees.					
Student workload:					
weekly: 4			per semester: 60		

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:

11. Vukadinov J.: Gerijatrija i njega starih osoba, udžbenik, Medicinski fakultet, Novi Sad, 2006
12. Šarenac D.: Zdravstvena njega starih, udžbenik, Licej, Beograd, 2009

Recommended Literature:

13. Dujaković Z. i sar.: Gerijatrija - medicina starije dobi, udžbenik, Medicinska naklada, Zagreb, 2008
14. Stavljenić – Rukavina A., Mitermayer R. R., Roksandić T. S., Mustajbegović J.: Kvaliteta dugotrajne skrbi starijih osoba, Centar za gerontolgiju, Referentni centar Ministarstva zdravlja RH za zaštitu zdravlja starijih osoba, priručnik, Zagreb, 2012
15. Popović -Pejičić S.: Hipotalamus-hipofiza-štitnjača i starenje, Medicinski fakultet, Banj a Luka, 2005
16. Boltz. M.: Evidence-Based Geriatric Nursing Protocols for Best Practice, Springer Publishing Company, New York, 2012
17. Nair B. K.: Geriatric Medicine, Springer Singapore, Singapore, 2018
18. Chernoff R.: Geriatric Nutrition: The Health Professional's Handbook , Jones & Bartlett Learning, London, 2006
19. Taylor R.: Oxford Handbook of Palliative Care, Oxford University Press, Oxford, 2009
20. Kasper D., Fauci A., Hauser S., Longo D.: Harrison's Principles of Internal Medicine, McGraw-Hill Professional, New York, 2015

Course outcome (aligned with the study program outcomes):
Upon the course completion student should be able to recognize specific problems of the elderly, evaluate their functional abilities and possibilities of self-care, train them in self-care and treatment in senior citizens institutions and geriatric hospitals.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Olivera Đurović, PhD, Professional Studies Professor Milica Živaljević, PhD, Professional Studies Professor, Specialist in Oncology
Teaching Associate:	Damir Adrović, MD, Teaching Associate Danijela Simić, Teaching Associate, Specialist Professional Nurse Dijana Kukulić, Teaching Associate, Specialist Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

HEALTH CARE AND SOCIAL-SECURITY LEGISLATION

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Health Care and Social-Security Legislation					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-mod-01-b	mandatory	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Mastering basic legal concepts in the field of health legislation. Familiarizing students with the legal aspect of health care while developing professional awareness, responsibility, and humanity.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	The Law on Health Care Protection - basic provisions related to health care rights, participants in health care, health care activities, health care system, and financing of health care.				
Week II	Principles of health protection.				
Week III	The Law on Health Insurance.				
Week IV	The Law on Social Protection.				
Week V	Rulebook on detailed conditions for performing health activities.				
Week VI	Rulebook on the internal organization of health care institutions. Patient rights.				
Week VII	Legal regulations for the protection of the population from infectious diseases.				
Week VIII	Legal aspects of the nursing profession.				
Week IX	Elements of the draft law on nursing.				
Week X	The Law on Chambers, acquisition, renewal, and revocation of licenses for health care professionals.				
Week XI	Legal aspects of continuous medical education.				
Week XII	Rulebook on health care quality indicators.				
Week XIII	Legal aspects of professional supervision and (re)accreditation processes of health care institutions.				
Week XIV	Legal aspects of occupational health and safety.				
Week XV	The specifics of health and social legislation relating to the area of health care from the perspectives of the patient, nurse, health institution, state, and society.				
Methods of teaching: Lectures, workshops, analysis of practical case studies, problem-based learning, and e-learning.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Current laws and bylaws of the Republic of Montenegro in the field of health care.
2. Grujić V., Martinov Cvejin M., Legetić B.: Socijalna medicina, udžbenik, Medicinski fakultet, Nov i Sad, 2014

Recommended Literature:

3. Fregmen B. F.: Medical Law and Ethics, Prentice Hall, New Jersey, 2011
4. Herring J.: Medical Law and Ethics, Oxford University Press, Oxford, 2020

Course outcome (aligned with the study program outcomes):

Upon completion of the course and passing of the exam the student will be able to define the basic concepts of health care legislation; list the main aspects of the Law on Heath Insurance and Health Care Protection, as well as the basic legal aspects of nursing; explain the organization of the Chamber of Health Care Professionals; and to outline the procedures for acquiring, renewing and revoking licenses for health care professionals. Additionally, the student will be able to identify indicators of health care quality and understand and explain the rights and responsibilities of health care professionals.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Šimon Slađana, PhD, Professional Studies Professor
Teaching Associate:	Šimon Slađana, PhD, Professional Studies Professor Katarina Pešić, Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

HEALTH CARE EDUCATION METHODOLOGY AND HEALTH PROMOTION

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Health Care Education Methodology and Health Promotion

Course Code	Course Status	Year	Number of ECTS	Number of classes	
znj-07	mandatory	first	5	lectures	15
				exercises	30
				other forms of active classes	0
				professional practice	0

Study programs for which it is organized:
Bachelor of Applied Studies in Nursing

Prerequisites:
no

Course objective:
The purpose of health promotion in pre-schools and schools is the adequate development of children and the youth, so that they can grow into healthy, satisfied, successful, self-aware and responsible individuals. In addition to that, the objective of the course is to equip students to understand the role of both the health and non-health sectors and the ways in which they are actively integrated in the process of health promotion.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	The definition and concept of health care promotion, principles and strategies.
Week II	The promotion of health and health education in strategic documentation.
Week III	Environments for health promotion implementation.
Week IV	Populational and high-risk strategy for prevention of chronic non-communicable diseases (cardiovascular diseases, diabetes, breast cancer, etc.).
Week V	Behavioral and biological risk factors for the onset of chronic non-communicable diseases.
Week VI	The importance of health promotion in the prevention of infectious diseases (sexually transmitted diseases, lice, viral diseases, measles, COVID-19, etc.).
Week VII	Models of behavior which explain changes that lead to health.
Week VIII	Health education - definitions, goals, methods, and resources.
Week IX	Structure of preventive-promotional programs in preschool and school institutions.
Week X	Maternity schools.
Week XI	Preschool and school programs.
Week XII	Training marginalized groups of people (homeless, Roma, safe houses, etc.).
Week XIII	Content and organization of work in Health Promotion Centers of public health institutes.
Week XIV	Evaluation of the health promotion program.
Week XV	Continuous medical education for health care professionals.

Methods of teaching:
teaching activities, lectures using didactic materials, exercises, workshops, field teaching, and seminar paper.

Student workload:

weekly: 3	per semester: 45

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Hojer S.: Pristupi i metode u zdravstvenom odgoju, udžbenik, Koledž zdravlja, Ljubljana, 2005

Recommended Literature:
2. Graser S., Hill E., Potter B., Matijević S., Jović S.: Promocija zdravlja zasnovana na dokazima, Ministarstvo zdravlja Republike Crne Gore, 2006
3. Gerlič I.: Savremene informacione tehnologije u obrazovanju, Nacionalna izdavačka kuća Slovenija, Ljubljana, 2010
4. Pokorn D.: Ishrana u različitim fazama života: dodatak ishrani u ishrani, Marbona, Ljubljana, 2013
5. Koelen M. A., Van den Ban A. W.: Health Education and Helath Promotion, Wageningen Academic Publishers, London, 2014
6. Scriven A.: Promoting Health: A Practical Guide, Bailliere Tindall, Edinburg, 2010
7. Park K.: Parks Text Book Of Preventive & Social Medicine, Banarsidas Bhanot Publishers, Manchester, 2017

Course outcome (aligned with the study program outcomes):
Upon completion of the course and passing the exam, the student will possess skills necessary for work with health care professionals and other community members, groups and individuals in carrying out on health promotion.Above all they will understand the importance of health care education and health promotion, especially for the successful development of preschool children, schoolchildren, and the youth.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	30	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics Slavica Konević, PhD, Professional Studies Professor
Teaching Associate:	Vukica Đukić, Teaching Associate, MSc in Nursing and Therapy Katarina Pešić, Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

HEALTH CARE SYSTEMS IN THE EU

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Health Care Systems in the EU					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-mod-02-b	mandatory	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: To recognize the importance of personnel for the organization, understand the process of staff development in relation to job requirements, recognize the importance of lifelong learning, and understand methods for transferring new knowledge to personnel.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Competences of the module.				
Week II	Portfolio.				
Week III	Human resource planning – strategy, model, needs, internal recruitment of human resources.				
Week IV	External recruitment.				
Week V	Career planning.				
Week VI	Acquisition of new personnel. Staff selection, selection methods. Selection of management personnel.				
Week VII	Employment policy and mobility within the EU.				
Week VIII	Knowledge management: the importance of knowledge in society, forms and expansion of knowledge within an organization.				
Week IX	Processes of knowledge acquisition, use, transfer, and preservation within an organization.				
Week X	Measurement and evaluation of intellectual capital.				
Week XI	The learning organization. Motivation for education.				
Week XII	Quality and efficiency of education.				
Week XIII	EU regulations protecting and promoting public health.				
Week XIV	Examples of different ways of organizing health care systems in European countries (Belgium, Germany, Switzerland).				
Week XV	Local authorities and management of local public health issues.				
Methods of teaching: Lectures, practical classes, case analysis, e-learning.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature

1. Gerlič I.: Savremene informacione tehnologije u obrazovanju, udžbenik, Nacionalna izdavačka kuća Slovenija, Ljubljana, 2010

Recommended Literature:

2. Simić S. i sar.: Socijalna medicina, udžbenik, Medicinski fakultet, Beograd, 2012
3. Mossialos E., Permanand G., Baeten R., Hervey T.: Health systems governance in Europe: the role of European Union law and policy, Cambridge University Press, 2010
4. Aspalter C.: Health Care Systems in Europe and Asia, Routledge, London, 2015
5. De Gooijer W.: Aspalter C.: Trends in EU Health Care Systems, Springer, Munchen, 2006

Course outcome (aligned with the study program outcomes):

The student is aware of and understands the importance of human capital for the successful and efficient functioning of an organization.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Šimon Slađana, PhD, Professional Studies Professor
Teaching Associate:	Šimon Slađana, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

HEALTHY LIFESTYLE AND SOCIOLOGY OF HEALTH AND DISEASES

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Healthy Lifestyle and Sociology of Health and Diseases

Course Code	Course Status	Year	Number of ECTS	Number of classes	
znj-14	mandatory	second	6	lectures	15
				exercises	15
				other forms of active classes	0
				professional practice	0

Study programs for which it is organized:
Bachelor of Applied Studies in Nursing

Prerequisites:
no

Course objective:
Familiarization of students with the current concept of health and disease sociology, interdisciplinary approach and understanding of health and disease, acquisition of a critical attitude to certain lifestyles affecting the health-disease possibility relation, awareness of importance of prevention, social, national and economic consequences of disease and impact of high technologies on health and disease.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Notion of a healthy lifestyle.
Week II	State of mind, optimism, maintaining self-confidence, a positive attitude, and distinguishing everyday challenges from daily mood.
Week III	Mental hygiene.
Week IV	Psychological, occupational, sociological, and economic consequences of illness.
Week V	The impact of high technologies on the sociology of health and illness and the emergence of new types of diseases (computers, mobile phones, television, etc.).
Week VI	Impact of stress, work, and everyday events. Burnout syndrome.
Week VII	Healthy nutrition, recreation, sports.
Week VIII	Cultural activities, hobbies, maintaining social contacts.
Week IX	Time break (quality rest, change of destination, etc.).
Week X	Politics and everyday life.
Week XI	Contribution to the community (Red Cross, humanitarian actions, helping others, etc.).
Week XII	Dilemma: urgent–important.
Week XIII	Decision-making skills.
Week XIV	Communication skills, listening skills, negotiation skills.
Week XV	Emotional intelligence.

Methods of teaching:
Lectures, exercises, case study, discussion, e-learning.

Student workload:

weekly: 2	per semester: 30

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:

Required Literature:

1. Grujić V., Martinov Cvejin M., Legetić B.: Socijalna medicina, udžbenik, Medicinski fakultet, Novi Sad, 2011

Recommended Literature:

2. Ule M.: Socijalni aspekti moderne medicine, udžbenik, Aristej, Šentilj, 2013
3. Grujić V., Martinov Cvejin M., Legetić B.: Ekonomika zdravstva, udžbenik, Medicinski fakultet, Novi Sad, 2013
4. Nettleton S.: The sociology of Health and Illness, Polity Press, Cambridge, 2006
5. Weitz R.: The Sociology of Health, Illness, and Health Care: A Critical Approach, Cengage Learning, London, 2006
6. White K.: An Introduction to the Sociology of Health and Illness, Sage Publications, London, 2012

Course outcome (aligned with the study program outcomes):

Upon completion of the course and passed exam students will be familiar with the current concept of health and disease sociology, interdisciplinary approach and understanding of health and disease, they will acquire a critical attitude to certain lifestyles affecting the health-disease possibility relation, awareness of importance of prevention. In particular, the student understands the social, national, and economic consequences of human health and disease.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Šimon Slađana, PhD, Professional Studies Professor
Teaching Associate:	Jelena Kovačev, Teaching Associate, Master Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

HUMAN RESOURCES MANAGEMENT IN HEALTH CARE

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Human Resources Management in Health Care					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-03-a	elective	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Familiarization of students with the concept of human resources management. The intention of the course is to present to students principal issues in human resources management and segments of manager activities, with human resources management as one of most important. The final goal of the course predominantly determines the selection of contents (topics) and method or classes realization.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Introduction to management and human resource management. Main activities of personnel management and human resources management.				
Week II	Differences between human resources management and personnel function. Social protection in industry.				
Week III	Recruitment and selection. Adoption of other personnel activities. Legislation. Flexibility and diversity. Information technology. Professional associations of personnel members.				
Week IV	Human resources management. Main characteristics of human resources management. Issues of human resources management concept. Human resources management marketing. Human resources strategy and planning.				
Week V	Strategy devising process. Human resources planning. Anticipation of human resources demand. Job analysis. Evaluation of internal and external human resources supply.				
Week VI	Unemployment. Underqualification. Competition. Geographical factor. Assets. Development. Rewarding. Relations with employees.				
Week VII	the European Union. Recruitment procedures. Job description and person specification, competence profile. Person specification, competence profile in the recruitment context.				
Week VIII	Vacancy advertising. Targeted recruitment. Administrative procedures. Selection, shortlisting, and interviews. Telephone interview. Interview. Interview techniques.				
Week IX	Administrative procedures. Supplementary selection techniques. Psychological testing. References. Medical examinations.				
Week X	Relations in employment. Rights and responsibilities of both parties. Law on Employment. Retirement. Payment for work done or performance evaluation. Role of employer.				

Week XI	Impact of personal problems on the job. Confidentiality.
Week XII	Counseling skill. Communication process. Hierarchical communication levels. Protection at work.
Week XIII	Working time regulation in the EU. Risk assessment. Partnership and involvement of employees.
Week XIV	Employee involvement techniques. Basic characteristics of disciplinary procedure**.** Absence control. The role of human resources manager.
Week XV	Dismissal and redundancy. Fixed-term service agreement. Illegal dismissal. Rights of dismissed employees. Work abroad.

Methods of teaching:
Lectures, practical exercises, workshops, discussion, simulations, analysis of practical case studies, and e-learning.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature
1. Mićović P.: Zdravstveni menadžment, couresebook, ECPD, Beograd, 2008

Recommended Literature:
2. Žujić D.: Menadžment ljudskih resursa i kvalitet, Centar za primijenjenu psihologiju društva psihologa Crne Gore, Beograd, 2013
3. Frančesko M.: Kako Unaprediti menadžment u preduzeću, Novi Sad, Prometej, 2013
4. Flynn W. J., Mathis R. L., Jackson J. H.: Healthcare Human Resource Management, Cengage Learning, Boston, 2006
5. Niles N.: Basic Concepts of Health Care Human Resource Management, Jones & Bartlett Learning, London, 2012
6. Dun R. T.: Dunn and Haimann's Healthcare Management, Health Administration Press, New York, 2010

Course outcome (aligned with the study program outcomes):
Students will be able to apply the acquired knowledge in human resources management within their future profession.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Marko Carić, PhD, Professional Studies Professor Dudić Branislav, PhD, Professional Studies Professor
Teaching Associate:	Marko Carić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

HYGIENE WITH THE BASICS OF MICROBIOLOGY AND PARASITOLOGY

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Hygiene with the Basics of Microbiology and Parasitology

Course Code	Course Status	Year	Number of ECTS	Number of classes	
znj-06	mandatory	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	330

Study programs for which it is organized:
Bachelor of Applied Studies in Nursing

Prerequisites:
no

Course objective:
Acquisition of knowledge about the health education process as a measure of health care at all levels of health protection, including mastering the principles, objectives, and methods of applying health education tools, as well as influencing changes in risky behavior among individuals, families, and the community. Development of students' interest in continuous professional and general education, i.e., training health care professionals for risk management in health care institutions. Introduction to cellular organization and the basic characteristics of bacteria, viruses, and parasites.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Hygiene and health. Hygiene requirements in planning and construction of health care institutions.
Week II	Illumination, ventilation and heating in health care institutions. Air quality in health care institutions.
Week III	Water and health. Health safety of drinking water. Water supply of health care institutions. Disinfection of drinking water.
Week IV	Disposal of solid and liquid waste. Disposal of medical waste.
Week V	Personal hygiene of health care professionals. Hand hygiene and personal protection substances.
Week VI	Hygiene procedures in maintaining hygiene of sick persons. Hygienic-epidemiologically adequate solutions of sanitary area. Hygienically adequate treatment of hospital laundry. Hygienic requirements for kitchens and food distribution. Application of HACCP system in food and drinking water handling.
Week VII	International legislation and legislation in Montenegro, in the area of food and general use objects safety.
Week VIII	Risk management in health care institutions. Determining critical spots in health care institutions. Epidemiological importance of defining critical spots and critical spot control plan in health care institutions. Health education within the system of scientific disciplines.
Week IX	Health: the contemporary concept. Health education. Factors influencing health. Lifestyle. Health and the environment. Health promotion and improvement.

Week X	Behavior and behavior change. Disease prevention. Education, counseling, and information dissemination. Planning, implementation, and evaluation of health education interventions in primary, secondary, and tertiary healthcare institutions.
Week XI	Communication, educational, and organizational methods and strategies. The seven principles of education of the WHO.
Week XII	Implementation of health education interventions within the healthcare system.
Week XIII	General bacteriology: classification of microorganisms, anatomy and physiology of the bacterial cell, bacterial metabolism, effects of physical and chemical agents on microorganisms, pathogenicity and virulence factors, antibiotics, antimycotics and chemotherapeutic agents, physiological microflora, rapid diagnostic tests, and molecular methods in microbiology.
Week XIV	General and special virology: general characteristics of viruses, effects of physical and chemical agents on viruses, pathogenesis and control of viral infections, interferons and antiviral drugs, laboratory diagnostics, and DNA and RNA viruses of significance in human pathology.
Week XV	Parasitology.

Methods of teaching:
lectures, practical classes, discussion, problem solving, and clinical practice.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:

1. Novaković B., Grujić V.: Higijena i zdravstveno vaspitanje, udžbenik, Medicinski fakultet, Nov i Sad, 2005

Recommended Literature:

2. Kristoforović-Ilić M.: Higijena sa medicinskom ekologijom, udžbenik, Ortomedics, Novi Sad, 2013.
3. Kekuš D.: Zdravstveno vaspitanje, udžbenik, Digital art, Beograd, 2009
4. Baračkov N., Bujak J., Ilić D., Jović S., Panić M. i sar.: Vaspitanje za zdravlje kroz životne vještine, Ministarstvo prosvijete i sporta Republike Crne Gore, 2007
5. Graser S., Hill E., Potter B., Matijević S., Jović S.: Promocija zdravlja zasnovana na dokazima, Ministarstvo zdravlja Republike Crne Gore, 2006
6. Andersen B. M.: Prevention and Control of Infections in Hospitals, Springer, Munchen, 2019
7. Egerton C. F. G.: Lectures on Physiology, Hygiene, for Hospital and Home Nursing, Forgotten Books, London, 2018
8. Gerard T. J., Berdell F. R., Case C. L.: Microbiology: An Introduction, Books a la Carte Edition, Benjamin Cummings, New York, 2009

Course outcome (aligned with the study program outcomes):
The student acquires practical knowledge of professional competencies within their field, as well as knowledge of risk analysis and risk management in health care institutions with regard to hygiene and the protection of the health of health care workers and health care service users at all levels of health care. In addition, upon completion of the course and successful passing of the exam, the student will be familiar with the cellular organization and basic characteristics of bacteria, viruses, and parasites.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-

midterms	30	-	-
Full name of the lecturers and teaching associates:			
Lecturer:	Slavica Konević, PhD, Professional Studies Professor Zorica Živković, PhD, Professional Studies Professor, Specialist in Pediatrics		
Teaching Associate:	Ljiljana Stijepović, Teaching Associate, MSc in Nursing Dijana Kukuličić, Teaching Associate, Specialist Professional Nurse		
Specific features that need to be emphasized for the course: no			
Note (if applicable): no			

INTENSIVE CARE UNIT NURSING

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Intensive Care Unit Nursing					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-06-a	elective	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: Basics of Nursing					
Course objective: Primary objectives are the adoption of current theoretical and practical (resourcefulness) specialist knowledge in the area of intensive care nursing of critically ill/injured patients and training in the application of the acquired knowledge both in professional and research work. Development of critical thinking, independence in nursing, carrying out diagnostic and therapy procedures, development of team work ability.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Airway: evaluation, maintenance, enabling air passage.				
Week II	Breathing: adequacy assessment, ventilator support.				
Week III	Circulation: adequacy assessment, circulatory support.				
Week IV	Numerical systems for evaluation of condition of a critically ill/injured person.				
Week V	Cardiocirculatory arrest. Postresuscitation disease.				
Week VI	Brain death. Intensive care unit nursing of patients with acute circulatory disorders: cardiogenic, circular, cellular shock.				
Week VII	Intensive care unit nursing of patients with acute respiratory system disorders. Acute asphyxiation.				
Week VIII	Intensive care unit nursing of patients with acute cardiac function disorders.				
Week IX	Intensive care unit nursing of patients with central nervous system disorders. Coma.				
Week X	Intensive care unit nursing of acutely intoxicated patients.				
Week XI	Intensive care unit nursing of traumatized patients.				
Week XII	Intensive care unit nursing of patients with burns.				
Week XIII	Specific features of intensive care unit nursing in pediatrics.				
Week XIV	Intensive care unit nursing of patients after transplantation.				
Week XV	Early rehabilitation in intensive care therapy unit.				
Methods of teaching: Lectures, practical exercises, case study, discussion, e-learning, clinical practice.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:
Required Literature:
1. Pavlović A.: Kardiopulmonalna reanimacija, Obeležja, Beograd, 2007

Recommended Literature:
2. Spasojević I., Zdravstvena njega u jedinici intenzivne njege, interne skripte, 2019
3. Woodrow P.: Intensive Care Nursing: A Framework for Practice, Routledge, London, 2018
4. Morton P. G., Fontaine D. K.: Critical Care Nursing: A Holistic Approach, Wolters Kluwer, Doublin, 2008
5. Smith -Gabai H.: Occupational Therapy in Acute Care, AOTA Press, Maryland, 2011

Course outcome (aligned with the study program outcomes):
The student will be able to describe clinical conditions that require multidisciplinary care and explain how to provide nursing care for patients in specific clinical conditions.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Brane Gavrančić, PhD, Professional Studies Professor
Teaching Associate:	Zlatko Ćirić, Teaching Associate, Master of Healthcare Organization Mina Vučković, Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

MARKETING OF HEALTH CARE INSTITUTIONS

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Marketing of Health Care Institutions

Course Code	Course Status	Year	Number of ECTS	Number of classes	
znj-izb-04-a	elective	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0

Study programs for which it is organized:
Bachelor of Applied Studies in Nursing

Prerequisites:
no

Course objective:
The aim of the course is to enable students to acquire basic knowledge in the field of health care marketing and to familiarize them with contemporary marketing strategies and communication methods in health care. Accordingly, the primary objective of the course is to introduce students to the development and objectives of various areas of strategic marketing, including its dominant theories, which are essential for successful business development. Students will also gain knowledge of marketing campaigns, the design of marketing plans, and the basic methods used in the marketing of healthcare institutions, governmental bodies, as well as public campaigns and initiatives.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Nature and character of marketing. Evolution of marketing and approaches in studying it. Marketing management process.
Week II	Changes of marketing in health care institutions, government or governmental bodies. Presentation and analysis of marketing.
Week III	Marketing information system and market research Market analysis.
Week IV	Market segmentation and selection of targeted markets. Notion of public perception.
Week V	Importance of marketing in health care in strategic marketing.
Week VI	Market research. SWOT analysis, benchmarking and portfolio. BCG matrix.
Week VII	Integrated marketing communications. Promotional health campaigns. Prevention, promotion of public health and marketing.
Week VIII	Value chain and cost efficiency.
Week IX	General principles of marketing (marketing mix, models, methods and marketing techniques).
Week X	Designing promotional campaign plan. Targeting. Following post-marketing campaign.
Week XI	Medical marketing practice code. General marketing and targeted marketing campaigns. Different types of marketing materials in health care, depending on the target audience. Marketing outsourcing, marketing agencies.
Week XII	Printed material, printed media, billboards, electronic media, social networks.
Week XIII	Direct marketing. Fairs, conferences, meetings. Sponsorships. Website. Promotional material.

Week XIV	Presentation. Marketing and PR. Public appearances of employees, health care institution management, governmental bodies.
Week XV	Dress code. Appearance of employees, institution.

Methods of teaching:
Lectures, discussions, analysis of practical case studies, workshops, guest lectures by industry representatives (marketing or PR managers of healthcare institutions or business organizations), exercises, and e-learning.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature
1. Kotler P.: Upravljanje marketingom, udžbenik, Mate, Zagreb, 2011

Recommended Literature:
2. Macura P.: Marketing – mikro, mala i srednja preduzeća, udžbenik, Ekonomski fakultet, Banja Luka, 2009
3. Tasić Lj.: Farmaceutski menadžment i marketing, Nauka, Beograd, 2012
4. Berkowitz N. E.: Essentials Of Health Care Marketing, Jones & Bartlett Learning, Boston, 2010
5. Kotler P., Keller K.: Marketing, Management, Person Education, New Jersey, 2012

Course outcome (aligned with the study program outcomes):
Upon the completion of the course, students will be able to understand strategic marketing in health care and be capable to independently conduct research of marketing methods convenient for solution of a specific project task in terms of health care institutions, governmental bodies, or in terms of public campaigns or initiatives. Students will also be competent to evaluate relevant theories of strategic marketing in different empirical contexts and to understand interconnection between marketing strategy, operative-organizational parts of enterprises and market results. Students will understand how to manage marketing campaign, notion of marketing plan designing and primary methods used in marketing.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Marko Carić, PhD, Professional Studies Professor
Teaching Associate:	Marko Carić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

MEDICAL AND PHARMACEUTICAL WASTE

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Medical and Pharmaceutical Waste

Course Code	Course Status	Year	Number of ECTS	Number of classes	
znj-izb-01-b	elective	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0

Study programs for which it is organized:
Bachelor of Applied Studies in Nursing

Prerequisites:
no

Course objective:
Acquiring knowledge in the field of medical and pharmaceutical waste management, risk assessment methods, particularly the risk of infectious waste, and training students to independently or as part of teams to carry out the identification and classification (categorization) of medical and pharmaceutical waste, and to use data on its categorization for the development and implementation of Waste Management Plan.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Medical waste.
Week II	Pharmaceutical, chemical, pathoanatomical and radioactive waste.
Week III	Creation of waste.
Week IV	Waste flows in health care and other institutions.
Week V	Quantity assessment and risks.
Week VI	classification, collection, marking, storage, treatment and disposal of medical and pharmaceutical waste.
Week VII	Disposal of medical and pharmaceutical waste.
Week VIII	Contemporary methods of treatment and disposal of medical and pharmaceutical waste in Montenegro.
Week IX	Contemporary methods of treatment and disposal of medical and pharmaceutical waste in the world, EU regulative.
Week X	Principles of waste management.
Week XI	Place and role of the person in charge of medical waste management in health care.
Week XII	Agencies and institutions responsible for waste disposal.
Week XIII	National legal regulations.
Week XIV	Recommendations and good practice in the countries of the European Union.
Week XV	Drawing up the Waste Management Plan. Plans in Montenegro.

Methods of teaching:
Lectures, case analysis, discussion, workshops, and e-learning.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:

Required Literature

1. Tošović S. i sar.: Bezbedno upravljanje medicinskim otpadom, Nacionalni vodič dobre prakse, Ministarstvo zdravlja RS, Beograd, 2009
2. Matović V., Đukić M., Antonijević B.: Praktikum iz kliničko-toksikoloških analiza, ur.: Matović V., Paragon, Beograd, 2005

Recommended Literature:

3. Jokanović M.: Toksikologija, udžbenik, ur.: Gavrilović M., udžbenik, Elit Medica, Beograd, 2011
4. Landrum V. J.: Medical Waste Management and Disposal, Elseiver, London, 2011

Course outcome (aligned with the study program outcomes):

Acquired knowledge and skills in the management of medical and pharmaceutical waste, particularly hazardous waste, as well as the competence of professional staff to educate medical personnel, analyze the current situation, and develop and implement waste management plans in healthcare and pharmaceutical institutions.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	30	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Gordana Švonja Parezanović, PhD, Professional Studies Professor Srđan Stojanović, PhD, Professional Studies Professor
Teaching Associate:	Gordana Švonja Parezanović, PhD, Professional Studies Professor Jasmina Birta, Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

MEDICAL REHABILITATION

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Medical Rehabilitation					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-05-b	elective	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Adoption of principles, ideas and philosophy of modern rehabilitation of sick and injured persons by applying all necessary measures and procedures aimed at a maximum possible recovery, return to living and working environment, resocialization and inclusion into family and society through holistic and individualized approach and interdisciplinary collaboration within rehabilitation team.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Impacts of the living and working environment on psychophysical-social integrity of person.				
Week II	Notion, importance and essence of rehabilitation of sick and injured persons. Disability.				
Week III	Idea, philosophy and development of rehabilitation. Modern concept of rehabilitation.				
Week IV	Medicine-rehabilitation relationship.				
Week V	Rehabilitation division. Ethics and deontology.				
Week VI	Principles of rehabilitation. Side effects and indication.				
Week VII	Holistic approach. Individualization in approach. Multidisciplinary approach. Team work.				
Week VIII	Specific features of disability by age – childhood and adolescence, productive age, retirement age.				
Week IX	Physical, psychical and social aspects of disability. Disability and society.				
Week X	Classifications and models. medical, social, inclusive				
Week XI	Physical and social barriers. Discrimination in family and society. Accessibility. Handicap.				
Week XII	Medical rehabilitation Methodology – physical medicine in rehabilitation. Aids.				
Week XIII	Adaptations and modifications of living, working and public environment.				
Week XIV	Education. Working ability evaluation.				
Week XV	Professional rehabilitation.				
Methods of teaching: Lectures using various video materials, exercises, workshops, model-based practice, and clinical practice.					
Student workload:					
weekly: 4			per semester: 60		

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature
1. Nedvidek B.: Osnovi fizikalne medicine i rehabilitacije, coursebook, Medicinski fakultet, 2013

Recommended Literature:
2. K. Savić, A. Mikov: Rehabilitacija dece i omladine, Orto medics, Novi Sad, 2007
3. Jovanović Sretenović T.: Praktikum iz Osnovi rehabilitacije, Visoka zdravstvena škola primijenjenih studija, Beograd, 2012
4. Delin A.: U susret osobama sa invaliditetom, Britanski savjet, Beograd, 2008
5. Vučić R., Marković P., Savković N.: Klinička radna terapija - praktikum sa terapeutskim medicinskim podsetnikom, Alternativa, Beograd, 2006
6. Playforth S.: Upoznavanje osoba sa invaliditetom, Britanski savjet, Beograd, 2008
7. DeLisa J. A., Gans B. M., Walsh N. E., Bockenek W. L.: Physical Medicine and Rehabilitation - Principles and Practice, Lippincott Williams & Wilkins, New York, 2004
8. Smith -Gabai H.: Occupational Therapy in Acute Care, AOTA Press, Maryland, 2011
9. Crouch R., Alers V.: Occupational Therapy in Psychiatry and Mental Health, Wiley-Blackwell, New Jersey, 2005

Course outcome (aligned with the study program outcomes):
By applying the adopted principles and philosophy of modern rehabilitation, through holistic considering of psychophysical-social integrity and individualization in the approach to sick or injured persons and by identifying their specific needs, students will be able to determine application of all required measures and procedures for successful accomplishment of the goal in the process of their recovery, resocialization and reintegration through inclusion into family and society by applying a possible primary, secondary and tertiary prevention of disability.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Ljubica Nikčević Krivokapić, PhD, Professional Studies Professor, Specialist in Physical Medicine and Rehabilitation
Teaching Associate:	Ivana Kaćanski, PhD, Professional Studies Professor Vesna Bilafer, Teaching Associate, Master Professional Nurse

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

MENTAL HYGIENE

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Mental Hygiene					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-05-a	elective	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Students are trained to perceive phenomena of mental health and mental illness from a wider, multidisciplinary and multidimensional aspect, to assume responsible tasks in protection and improvement of mental health in their work within community, as well as to take care of sick persons against use of high technology and preserve human relationships in institutions and patients homes.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Subject and theoretical fundamentals of mental health.				
Week II	Prevention of mental disorders.				
Week III	Mental health of the entire human life cycle. Birth and childhood. Adolescence. Adulthood. Old age.				
Week IV	Modern life problems: Alienation. Living in an urban environment. Living in a rural environment				
Week V	Nutrition issues. Physical activities. Life crises.				
Week VI	Sickness and disablement in family. Stress and burn-out syndrome.				
Week VII	Emergencies. Refugees, armed conflicts. Natural disasters. Posttraumatic conditions.				
Week VIII	Social pathology and maladaptive behavior. Marginalized groups. Extramarital status. LGBT population.				
Week IX	Domestic violence. Violence against women. Violence against old people.				
Week X	Alcoholism. Drug-addiction. Prostitution.				
Week XI	Religious sects. Pathological gambling. Suicidality. New forms of addiction.				
Week XII	Approach to person from mental-hygiene aspect. Health and sickness.				
Week XIII	Dying and death. Dehumanization and humanization of relations.				
Week XIV	Communication in health care profession.				
Week XV	Comprehensive protection of mental health.				
Methods of teaching: Lectures, exercises, workshops, discussion, seminar paper.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Simić M., Kovačević K.: Mentalna higijena, coursebook, autorsko izdanje, Beograd, 2004

Recommended Literature:

2. Kaličanin P. i dr.: Stres, zdravlje, bolest, coursebook, Obeležja, Beograd, 2011
3. Berger D.: Zdravstvena psihologija, Društvo psihologa Crne Gore, Centar za prim. psihologiju, Beograd, 2012
4. Havelka M. i dr.: Zdravstvena psihologija, Naklada Slap, Jastrebarsko, 2012
5. Nikolić D.: Bolesti zavisnosti, Narodna knjiga-Alfa, Beograd, 2007
6. Stanković Z., Begović D.: Alkoholizam od prve do poslednje čaše, Kreativni centar, Beograd, 2005
7. Glen A.: Mental Hygiene: How To Change Your Mind, CreateSpace Independent Publishing Platform, London, 2018
8. Tria G. E., Gaerlan J. E., Limpingco D. A.: Principles of Mental Hygiene, Pantas Publishing & Printing, Roterdam, 2010

Course outcome (aligned with the study program outcomes):

Adoption of knowledge and mastering skills in evaluation, monitoring, creating and carrying out therapy communication with health protection beneficiaries – persons with mental health issues, members of their families and healthy members of the community.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Jadranka Jovanović Privrodski, PhD, Professional Studies Professor, Specialist in Pediatrics, Subspecialist in Developmental Neurology and Psychiatry, and Subspecialist in Clinical Genetics Slavica Konević, PhD, Professional Studies Professor
Teaching Associate:	Jelena Kovačev, Teaching Associate, Master Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

PUBLIC HEALTH

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Public Health					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-08	mandatory	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: The objective of the course is familiarization of students with measures, levels and organization of health care and their training for applying a social-medical approach in future practice, primarily in the field of nursing.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	The development and definition of social medicine.				
Week II	Health and quality of life.				
Week III	Social care of health.				
Week IV	Communication in health care.				
Week V	Health protection.				
Week VI	Social inequalities in health care and obtaining health protection. Vulnerable categories.				
Week VII	Health care policy. Criteria for evaluation of socio-medical importance of health issues.				
Week VIII	Methods of prevention and control of chronic non-communicative diseases.				
Week IX	Health protection systems around the world.				
Week X	Health protection programming.				
Week XI	The role of health care institutions and health care professionals in the system of health care protection.				
Week XII	Health care technology.				
Week XIII	Quality of health protection.				
Week XIV	Classification systems in health care.				
Week XV	Management in health care.				
Methods of teaching: lectures, exercises, discussions, and problem solving.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Jakovljević Đ., Grujić V., Martinov Cvejin M.: Socijalna medicina, udžbenik, Medicinski fakultet, Nov i Sad, 2014

Recommended Literature:

2. Hojer S.: Pristupi i metode u zdravstvenom odgoju, udžbenik, Koledž zdravlja, Ljubljana, 2005
3. Simić S. i sar.: Socijalna medicina, udžbenik, Medicinski fakultet, Beograd, 2012
4. Murphy F.: Community Engagement, Organization, and Development for Public Health Practice, Springer Publishing Company, New York, 2004
5. Park K.: Parks Text Book Of Preventive & Social Medicine, Banarsidas Bhanot Publishers, Manchester, 2017
6. Scriven A.: Promoting Health: A Practical Guide, Bailliere Tindall, Edinburg, 2010
7. Aspalter C.: Health Care Systems in Europe and Asia, Routledge, London, 2015

Course outcome (aligned with the study program outcomes):

Upon completion of the course, the students will be familiar with the principles of public health, health care politics, indicators of the population health status, classification systems in health care, and they will understand the functioning of the health care system, especially in the area of nursing, from the perspective of patients, health care professionals, health care institutions, the government, and society.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Olivera Đurović, PhD, Professional Studies Professor Šimon Slađana, PhD, Professional Studies Professor
Teaching Associate:	Vukica Đukić, Teaching Associate, MSc in Nursing and Therapy Katarina Pešić, Teaching Associate, Professional Nurse

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

QUALITY CONTROL

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Quality Control					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-21	mandatory	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: The objective of the course is to understand the concept and essence of quality as a market category, to recognize the specific features of quality within a work organization, with special emphasis on the particularities of service in a specific sector, and to become familiar with the basics of institutional organization, methods of institutional management, specificities of decision-making processes, administrative procedures, and change management within the institution. The objective also includes understanding and accepting the concept of standardization and the importance of standards in the process of defining quality.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Quality management: concept, definition of quality, reasons for implementing quality control processes.				
Week II	Characteristics of quality in specific areas (e.g., specific features of quality control in health care...), forms and levels of quality manifestation.				
Week III	Quality management systems: definition and development of various quality systems.				
Week IV	Service standardization as the basis of quality, areas of standard application, types of standards.				
Week V	Requirements of ISO 9000, ISO 9001, ISO 14000, ISO 22000 standards; implementation of the HACCP system, HALAL standards.				
Week VI	The importance of internal procedures within an organization.				
Week VII	Management chain.				
Week VIII	The role of employees in ensuring quality, the importance and role of human resources, the human resource management process.				
Week IX	The importance and role of management in achieving quality.				
Week X	Managers as quality factors.				
Week XI	The role of service users in creating service quality.				
Week XII	Perception, deviations, satisfaction, methods for measuring service quality.				
Week XIII	Strategic approach to quality, trends in business orientation of companies, changes in the structure of offerings.				
Week XIV	Strategic adaptation of services to modern trends.				
Week XV	Market segmentation, differentiation, positioning, application of modern technologies.				

Methods of teaching:
Lectures, case analysis, discussion, workshops, and e-learning.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Legetić B.: Principi menadžmenta, udžbenik, Ekonomski fakultet, Subotica, 2007

Recommended Literature:
2. Milović Lj.: Organizacija zdravstvene nege sa menadžmentom, udžbenik, Naučna knjiga, Beograd, 2004
3. Grujić V., Martinov-Cvejin M., Legetić B.: Menadžment u zdravstvu, udžbenik, Medicinski fakultet, Nov i Sad, 2007
4. Gras J. M.: Laboratory quality control and patient safety, De Gruyter, Paris, 2017
5. Bruce W.: Basic Quality Assurance and Quality Control in the Clinical Laboratory, Little Brown & Co, London, 2004
6. Morrisey M. A.: Health Insurance, Health Administration Press, 2007
7. Beik J. I.: Health Insurance Today: A Practical Approach, Saunders, Philadelphia, 2010

Course outcome (aligned with the study program outcomes):
After attending and passing the course, the student should be qualified to practically apply internal procedures and standards for the purpose of establishing and controlling the quality of services, to determine and rank quality criteria, to master techniques and methods for measuring and controlling quality, and to evaluate the application of established standards, with a special focus on the type of organization they belong to. Additionally, the student should be trained in how to adopt and implement corrective measures aimed at quality management.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Marko Carić, PhD, Professional Studies Professor Dudić Branislav, PhD, Professional Studies Professor
Teaching Associate:	Marko Carić, PhD, Professional Studies Professor Dudić Branislav, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

PATIENT CARE AT HOME AND PATRONAGE NURSING

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Patient Care at Home and Patronage Nursing					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-mod-01-a	mandatory	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: Basics of Nursing					
Course objective: Training students in organizing and carrying out nurse interventions within nursing of pregnant women, newborns, young children, elderly, frail, injured, or sick individuals in their homes, as well as in participating in medical teams in accordance with modern principles of nursing.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Concept and scope of home nursing care.				
Week II	Concept and scope of patronage nursing.				
Week III	Rehabilitation procedures in home settings.				
Week IV	Care of pregnant women and childbirth in home settings.				
Week V	Working with children.				
Week VI	Education of family members, volunteers, and other individuals involved in the care and treatment of frail, ill, or injured persons.				
Week VII	Methods of field visits in urban and rural settings.				
Week VIII	Which interventions a nurse is allowed and not allowed to perform.				
Week IX	Specific aspects of working with elderly persons.				
Week X	Specific aspects of working with persons with disabilities.				
Week XI	Assessment of physical and mental status.				
Week XII	Implementation of nursing interventions in accordance with the required level of care.				
Week XIII	Methods of communication, including communication with the patient's family.				
Week XIV	Ethical issues.				
Week XV	Unforeseen situations (drug addiction, aggression, domestic violence, suicide attempts, etc.).				
Methods of teaching: Lectures using various video materials, exercises, workshops, simulations, discussion, e-learning, clinical practice, and fieldwork.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Krnić H., Vićovac Lj.: Kućna njega oboljelih i povređenih, Crveni krst Crne Gore, Beograd.

Recommended Literature:

2. Bedekovič -Petrovski N.: Rad patronažne sestre, Dom zdravlja Remetinec, Remetinec, 2011
3. Savezni zavod za zdravstvenu zaštitu Beograd: Priručnik za patronažnu službu SR Crne Gore, Beograd, 2005
4. Stojiljković J.: Zdravstvena nega, udžbenik, autorsko izdanje, Beograd, 2008
5. Marinković R. i sar.: Sestrinske procedure (prevod sa engleskog), Data status, Beograd, 2010
6. Šarenac D.: Zdravstvena njega starih, udžbenik, autorsko izdanje, Licej, Beograd, 2009
7. Harris M.: Home Health Care, Jones & Bartlett Learning, Massachusetts, 2009
8. Marrelli T. M.: Home Care Nursing: Surviving In An Ever-changing Care Environment, Sigma Theta Tau International, London, 2016
9. Monks K. E., Jaffe M. S.: Home Health Nursing, Assessment and Care Planning, Mosby, London, 2012
10. McEvan M.: Health Visiting, McHill Publishing, New York, 2012

Course outcome (aligned with the study program outcomes):

Students will be trained to carry out nursing interventions within home healthcare, including identifying needs, assessing the physical and mental status of pregnant women, newborns, young children, the elderly, frail, injured, or ill persons, and implementing specialized care in home settings.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Brane Gavrančić, PhD, Professional Studies Professor Zorica Živković, PhD, Professional Studies Professor, specialist in pediatrics
Teaching Associate:	Danijela Radoičić, Teaching Associate, Master of Management in the Healthcare System

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

RESEARCH METHODOLOGY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Research Methodology					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-06-b	elective	third	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: To equip students with the necessary skills for professional, scientific-research, and bibliographic-research work.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Importance of scientific work.				
Week II	Difference between scientific and professional work.				
Week III	Stages of professional, scientific-research, and bibliographic-research work.				
Week IV	Selection of topic and formulating a hypothesis.				
Week V	Selection of research methodology. Literature review. Methods of citing literature.				
Week VI	Experiment.				
Week VII	Surveys and processing of survey results, data protection.				
Week VIII	Statistical data processing.				
Week IX	Quality of the sample.				
Week X	Objectivity and subjectivity. Result, discussion and conclusion.				
Week XI	Structure and writing of professional and scientific work. Types of professional and scientific papers.				
Week XII	Valuation of professional and scientific papers.				
Week XIII	Ways of professional and scientific paper publishing.				
Week XIV	Citation.				
Week XV	Plagiarism. Protection of data. Methodology for preparing seminar and final papers.				
Methods of teaching: teaching activities, lectures using didactic materials, exercises, workshops, field teaching, and seminar paper.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature

1. Milankov V., Jakšić P.: Metodologija naučno-istraživačkog rada u biološkim disciplinama, udžbenik, Prirodno-matematički fakultet, Novi Sad, 2006
2. Šomođi Š., Novković N., Kraljević-Balalić M., Kajari K.: Uvod u naučni rad, udžbenik, Poljoprivredni fakultet, Novi Sad, 2004

Recommended Literature:

3. Konvencionalne i elektronske baze podataka.
4. Ebel H. F., Bliefert C., Russey W. E.: The art of scientific writing, Wiley-VCH, Verlag GmbH & Co. KgaA, Weinheim, 2004

Course outcome (aligned with the study program outcomes):

Possession of necessary knowledge that will enable students to engage in professional, scientific-research, and bibliographic-research work.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Marko Carić, PhD, Professional Studies Professor Srđan Stojanović, PhD, Professional Studies Professor
Teaching Associate:	Marko Carić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

ORGANIZATION OF HEALTH CARE SYSTEMS

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Organization of Health Care Systems					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-09	mandatory	first	5	lectures	15
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Course objective is to familiarize students with basics in organization of health care institutions and health care sector, manner of institution management, specific features of decision-making process in health care, motivation and medical team building, characteristics of internal communication in health care institutions, personnel and human resources building up, characteristics of business policy and planning strategy, administrative procedures and change management in health care institutions, mandatory and other forms of health insurance.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Health care system.				
Week II	The role of good communication.				
Week III	Health care system and health care institution management.				
Week IV	The role of manager, difference between commanding and leadership.				
Week V	Employment policy and schedule.				
Week VI	Introduction process, interview and integration of new employees. Training.				
Week VII	Health care institution organization.				
Week VIII	Primary, secondary and tertiary health protection.				
Week IX	Types of health care institutions.				
Week X	Law on Health care Protection.				
Week XI	Principles of health protection.				
Week XII	Protection of population from infectious diseases.				
Week XIII	Chamber of medical practitioners.				
Week XIV	Administration bodies in charge of health care.				
Week XV	Inspection supervision.				
Methods of teaching: Lectures, workshop, case study, discussion, e-learning.					
Student workload:					
weekly: 3			per semester: 45		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature:

1. Vasiljević R.: Metodika i organizacija zdravstvene nege, udžbenik, Viša medicinska škola, Beograd, 2014
2. Milović Lj.: Organizacija zdravstvene nege sa menadžmentom, udžbenik, Naučna knjiga, Beograd, 2014

Recommended Literature:

3. Grujić V., Martinov Cvejin M., Legetić B.: Socijalna medicina, udžbenik, Medicinski fakultet, Novi Sad, 2011
4. Garcarz W., Chambers R., Ellis S.: Make Your Healthcare Organisation a Learning Organisation, CRC Press, Manchester, 2013
5. Amelung W. E.: Healthcare Management, Springer-Verlag Berlin Heidelberg, Munchen, 2012
6. Morrisey Michael A.: Health Insurance, Health Administration Press, 2007
7. Beik Janet I.: Health Insurance Today: A Practical Approach, Saunders, Philadelphia, 2010

Course outcome (aligned with the study program outcomes):

Upon completing the course, student will be able to organize medical teams, ensure solid communication within health care institution, efficiently make decisions and manage changes under time pressure and understand systems of mandatory and other forms of health insurance.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Olivera Đurović, PhD, Professional Studies Professor Šimon Slađana, PhD, Professional Studies Professor
Teaching Associate:	Olivera Đurović, PhD, Professional Studies Professor Zlata Janjić, MD, Teaching Associate, Specialist in Plastic and Reconstructive Surgery

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

PATHOPHYSIOLOGY

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Pathophysiology					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-10	mandatory	second	6	lectures	45
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: Anatomy and Physiology					
Course objective: The course should provide students with knowledge of the mechanisms of damage to cells, tissues, and organs, familiarize them with the morphological changes underlying diseases, train them to recognize morphological changes in cells, tissues, and organs, and enable them to understand the etiology, pathogenesis, and clinical manifestations of the most significant metabolic disorders and functional disorders of organs and organ systems, as well as the causes and mechanisms of malignant cell transformation and the characteristics of tumor growth and the changes it induces in the organism.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Cellular adaptation.				
Week II	Cell aging and cell death.				
Week III	Common morphological changes of the cell.				
Week IV	Morphological changes of the cell with major consequences.				
Week V	Etiopathogenesis of acute inflammation.				
Week VI	Etiopathogenesis of chronic inflammation.				
Week VII	Malignant transformation of the cell.				
Week VIII	Consequences of malignant cell transformation. Growth.				
Week IX	Disorders of water and electrolyte balance.				
Week X	Disorders of acid–base balance.				
Week XI	Etiopathogenesis of malnutrition, obesity, and diabetes mellitus.				
Week XII	Etiopathogenesis of atherosclerosis, disorders of cardiovascular system function, and disorders of respiratory system function.				
Week XIII	Etiopathogenesis of disorders of kidney function, disorders of endocrine gland function and neuroendocrine regulation.				
Week XIV	Etiopathogenesis of disorders of nervous system function.				
Week XV	Etiopathogenesis of disorders of the digestive system, disorders of blood composition and function, and disorders of skin function.				
Methods of teaching: Lectures, practical classes, problem-oriented tasks, case analysis, discussion, and guest lectures by professionals from a medical biochemistry laboratory.					
Student workload:					
weekly: 5			per semester: 75		

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Radić S.: Opšta patofiziologija, udžbenik, Medicinski fakultet, Niš, 2012
2. Beleslin B.: Specijalna patološka fiziologija, Beograd 2008
3. Ubavić M.: Patološka fiziologija, interne skripte, Beograd, 2017
Recommended Literature:
4. Gamulin M., Marušić M., Kovač Z.: Patofiziologija, udžbenik, Medicinska naklada, Zagreb, 2015
5. Maličević Ž. i sar.: Osnovi patološke fiziologije, udžbenik, Panevropski univerzitet Apeiron, Banja Luka, 2009
6. Babić Lj., Borota R., Lučić A.: Priručnik praktičnih i seminarskih vježbi iz patološke fiziologije, Medicinski fakultet, Novi Sad, 2007
7. Kovač Z., Gamulin S. i s ar.: Patofiziologija, Zadaci za problemske seminare, Medicinska naklada, Zagreb, 2006
8. Živančević-Simonović S.: Opšta patološka fiziologija, udžbenik, Medicinski fakultet Kragujevac, 2012
9. Đorđević -Denić G. i sar.: Specijalna patološka fiziologija, udžbenik, Zavod za izdavanje udžbenika, Beograd, 2013
10. Banasik J. L.: Pathophysiology, Saunders, Los Angeles, 2018
11. Norris T. L.: Porth's Essentials of Pathophysiology, LWW, Liverpool, 2019
12. Huether S. E., McCance K. L.: Understanding Pathophysiology, Elsevier, London, 2016
13. McCance K. L., Huether S. E.: Pathophysiology for Pathophysiology: The Biologic Basis for Disease in Adults and Children, Mosby, London, 2006
14. Stewart J.: Anatomical Atlas of Pathophysiology, Wolters Kluwer, Glazgow, 2012

Course outcome (aligned with the study program outcomes):
Upon the completion of the course students have a command of basic medical terminology and are able to adequately present medically relevant facts, understand etiology and pathogenesis of principal metabolic and functional disorders of human organs and organ systems. They are able to connect their clinical manifestations with causes and mechanisms of their appearance and have a basic pathobiological knowledge enabling them to understand mechanisms of chemical agents and drug action, as well as a diagnostic strategy in case of pathological occurrences at a level required for competent carrying out of their duties.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	30	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Milan Ubavić, PhD, Professional Studies Professor, Specialist in Pathophysiology
Teaching Associate:	Milan Ubavić, PhD, Professional Studies Professor, Specialist in Pathophysiology

Specific features that need to be emphasized for the course:
no

Note (if applicable):
no

PSYCHOLOGY IN NURSING AND HEALTH CARE

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Psychology in Nursing and Health Care					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-19	mandatory	third	3	lectures	15
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: The aim of the course is to enable students to acquire knowledge of the psychology of patients and their family members at the moment of learning about a health problem, during the process of addressing the health issue, as well as in situations involving coping with severe or incurable illnesses, permanent consequences, and similar circumstances. In addition, the aim of the course is to train students to recognize and understand the emotional and psychological states that health care professionals may experience while working with patients. In addition to that, the objective of the course is for the student to acquire knowledge about the impact of psychological factors and the significance of stress in the development of psychosomatic disorders. They will also gain understanding of coping mechanisms for stress and pain management; as well as acquire knowledge that will enable them to recognize burnout syndrome in real-life professional environments, particularly within the health care sector, along with strategies to overcome it.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Health psychology and health promotion.				
Week II	Psychology of illness.				
Week III	Accepting disease as a reality.				
Week IV	Decisiveness in addressing health problems.				
Week V	Psychology of a patient at the moment of becoming aware of his/her health issue and during treatment.				
Week VI	Psychological states in case of uncertainty, expectations, unexpected treatment, unsuccessful treatment, deterioration in diagnosis.				
Week VII	Working with the patient's family: the role of family members, support, and openness in communication. Working with the patient's family: panic versus rationality. Working with the family in cases of receiving a poor diagnosis and in situations of loss.				
Week VIII	Working with the patient's family when referring to long-term illness and treatment.				
Week IX	Working with healthcare professionals in situations involving severe emotional states, patient anxiety, and shock.				
Week X	Burnout syndrome. Social institutions and support from relevant services.				
Week XI	Importance of communication. Basics of occupational therapy.				

Week XII	Pain management. Understanding the relation between the patient and health care professional.
Week XIII	Familiarization with the principles of health care habits development at different ages. The relationship between social support and health.
Week XIV	Review of models and strategies for promoting health related behaviors aimed at reducing health issues.
Week XV	Recognition of burn out symptoms and the adoption of methods to overcome it, especially among those employed in health care.

Methods of teaching:
Lectures, exercises, case study, discussion, e-learning.

Student workload:

weekly: 3	per semester: 45

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature:
1. Havelka M.: Zdravstvena psihologija, coursebook, Jastrebarsko-Naklada Slap, 2008

Recommended Literature:
2. Kekuš D.: Komunikacije u profesionalnoj praksi zdravstvenih radnika, Digital Art, Beograd, 2010
3. Rungapadiachy D. M.: Medosebna komunikacija v zdravstvu, Educy, Ljubljana, 2013
4. Payne S. H., Walker J.: Psihologija u zdravstveni njegi, Educy, Ljubljana, 2012
5. Friedman H. S.: Health psychology. Prentice Hall, 2013.
6. Ayers S., De Visser R.: Psychology for Medicine and Healthcare, SAGE Publications Ltd, London, 2018
7. Leigh H.: The Patient: Biological, Psychological, and Social Dimensions of Medical Practice, Springer, Munchen, 2010
8. Mathews A., Steptoe A.: Essential Psychology for Medical Practice, Churchill Livingstone, London, 2013

Course outcome (aligned with the study program outcomes):
Upon completion of the course and passing the exam, the student will gain knowledge of the psychology of patients and their families in the moment of health issue discovery, during the treatment process, and in uncertain situations. The student will also be trained in certain self-control techniques for managing emotional and psychological reactions they may experience as a health care professional while dealing with patients. Additionally, upon course completion, the student should be able to recognize and understand the health care psychology and theoretical models the course is based on; they should recognize psychological aspects of health and illnesses; to identify different psychological reactions to symptoms, illnesses and the importance of seeking professional help and social support; students will understand the role of stress in the development of psychosomatic illnesses and coping strategies; recognize the role of personal factors in experiencing and managing pain; understand the psychological aspects of severe illnesses and terminal condition; and to comprehend the psychological aspects of hospitalization in patients of different ages.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	40
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	20	-	-
midterms	30	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Jadranka Jovanović Privrodski, PhD, Professional Studies Professor, Specialist in Pediatrics, Subspecialist in

	Developmental Neurology and Psychiatry, and Subspecialist in Clinical Genetics
Teaching Associate:	Jelena Kovačev, Teaching Associate, Master Professional Nurse
Specific features that need to be emphasized for the course: no	
Note (if applicable): no	

SPECIALIZED ENGLISH FOR MEDICINE 1

Table S.2.6.-04 Form for the preparation of course information lists

Course Name:
Specialized English for Medicine 1

Course Code	Course Status	Year	Number of ECTS	Number of classes	
znj-izb-01-c	elective	first	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0

Study programs for which it is organized:
Bachelor of Applied Studies in Nursing

Prerequisites:
no

Course objective:
Course objective is familiarization with characteristics of the English language, adoption of phrases and patterns necessary for communication at professional level and adoption of techniques of written and oral expressing in professional communication.

Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:

Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.
Week I	Grammar: English alphabet, basic reading and writing rules, greeting.
Week II	Grammar: Personal pronouns, possessive pronouns, present tenses, gender and number of nouns.
Week III	Grammar: Numbers, colors, interrogative and affirmative sentences.
Week IV	Aspects of everyday life in English-speaking countries: visiting a primary healthcare center (health clinic).
Week V	Text processing: Illness.
Week VI	Text processing: A walk in nature.
Week VII	Prepositions with the dative and accusative cases; the imperative.
Week VIII	Modal verbs, the present perfect tense, sentence structure.
Week IX	Aspects of everyday life in English-speaking countries.
Week X	Professional texts related to the student's future profession; professional vocabulary.
Week XI	Examples of commercial and professional texts from practice.
Week XII	Text processing: parts of the body.
Week XIII	Text processing: medical equipment, hospitals, medical professions.
Week XIV	Text processing: pharmacy, medicinal herbs.
Week XV	Text processing: food, vitamins, nutrition, diet, cuisine.

Methods of teaching:
Lectures, practical exercises, communication activities, and e-learning.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:

Required Literature

1. Evans V., Dooley J., Tran T. M.: Career Paths, Medical Book 1, udžbenik, Express Publishing, Berkshire, 2012
2. Dragović R.: Engleski za zdravstvene radnike, udžbenik, Naučna knjiga, Beograd, 2014
3. Momčinović V., Tanay V., Žurić-Havelka S.: Medical English, udžbenik, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2008
4. Murphy R.: English Grammar in Use, Cambridge University Press, Cambridge, 2008
5. McCarthy M., O'Dell F.: English Vocabulary in Use, Cambridge University Press, Cambridge, 2006

Recommended Literature:

6. Hornby A. S.: Oxford Advanced Learner's Dictionary of Current English, Oxford University Pres, Oxford, 2008
7. MacLean J.: English in Basic Medical Science, Oxford University Press, Oxford, 2010

Course outcome (aligned with the study program outcomes):

Students will be able to apply the acquired knowledge in professional communication, create corresponding written forms in accordance with their professional communication and use speech patterns appropriate to a given situation.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Irena Petrušić, PhD, Professional Studies Professor
Teaching Associate:	Irena Petrušić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

SPECIALIZED ENGLISH FOR MEDICINE 2

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Specialized English for Medicine 2					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-03-d	elective	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: Specialized English for Medicine 1					
Course objective: Course objective is familiarization with characteristics of the English language, adoption of phrases and patterns necessary for communication at professional level and adoption of techniques of written and oral expressing in professional communication.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Grammar: Comparison of adjectives.				
Week II	Grammar: Cause-and-effect sentences, conditional sentences, future tense, past tense, subjunctive.				
Week III	Grammar: Verbs of motion, active and passive voice.				
Week IV	Grammar: Relative clauses.				
Week V	Grammar: Verbs with prepositions, suffixes and prefixes for forming adjectives.				
Week VI	Text processing: Aspects of everyday life in English-speaking countries: Holidays, family life, education.				
Week VII	Text processing: Aspects of everyday life in English-speaking countries: Urban life.				
Week VIII	Grammar: Dependent clauses.				
Week IX	Text processing: Geriatric center.				
Week X	Text processing: Dentist.				
Week XI	Text processing: Media.				
Week XII	Text processing: Surgery.				
Week XIII	Text processing: Waiting room in a health care facility.				
Week XIV	Text processing: Pharmacy.				
Week XV	Text processing: Maternity ward, childbirth.				
Methods of teaching: Lectures, practical exercises, communication activities, and e-learning.					
Student workload:					
weekly: 4			per semester: 60		
Student obligations during the course: Active teaching, electronic literature search, midterm exams.					

Literature:

Required Literature

1. Evans V., Dooley J., Tran T. M.: Career Paths, Medical Book 1, udžbenik, Express Publishing, Berkshire, 2012
2. Dragović R.: Engleski za zdravstvene radnike, udžbenik, Naučna knjiga, Beograd, 2014
3. Momčinović V., Tanay V., Žurić-Havelka S.: Medical English, udžbenik, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2008
4. Murphy R.: English Grammar in Use, Cambridge University Press, Cambridge, 2008
5. McCarthy M., O'Dell F.: English Vocabulary in Use, Cambridge University Press, Cambridge, 2006

Recommended Literature:

6. Hornby A. S.: Oxford Advanced Learner's Dictionary of Current English, Oxford University Pres, Oxford, 2008
7. MacLean J.: English in Basic Medical Science, Oxford University Press, Oxford, 2010

Course outcome (aligned with the study program outcomes):

Students will be able to apply the acquired knowledge in professional communication, create corresponding written forms in accordance with their professional communication and use speech patterns appropriate to a given situation.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-

Full name of the lecturers and teaching associates:

Lecturer:	Irena Petrušić, PhD, Professional Studies Professor
Teaching Associate:	Irena Petrušić, PhD, Professional Studies Professor

Specific features that need to be emphasized for the course:

no

Note (if applicable):

no

SPORTS MEDICINE

Table S.2.6.-04 Form for the preparation of course information lists					
Course Name: Sports Medicine					
Course Code	**Course Status**	**Year**	**Number of ECTS**	**Number of classes**	
znj-izb-03-b	elective	second	5	lectures	30
				exercises	30
				other forms of active classes	0
				professional practice	0
Study programs for which it is organized: Bachelor of Applied Studies in Nursing					
Prerequisites: no					
Course objective: Acquisition of knowledge on the specificity of etiology, pathogenesis, course, prognosis, prevention, and treatment of sports injuries from the perspective of physiotherapy. Familiarization of students with the basics of sports physiology and sports medicine, as well as how organs and organ systems function in a heightened, altered regime of psychophysical exertion.					
Course content (teaching units, forms of individual student work, methods of knowledge assessment) presented according to the working weeks in the academic calendar:					
Preparatory week	Introduction to the course, work plan, and methods of assessing acquired knowledge.				
Week I	Physiatric diagnostics, assessment, and the planning and implementation of physiotherapy programs within the treatment and rehabilitation of acute endogenous and exogenous sports injuries; soft tissue injuries (contusions, strains, ruptures of musculotendinous tissues, and ligamentous–capsular lesions); and injuries of the osteoarticular system, including chronic endogenous sports injuries (overuse syndromes), as well as postoperative procedures within sports medicine (arthroscopic procedures and invasive orthopedic-surgical interventions).				
Week II	Neuro muscular sinapse. Mediators and basic mechanisms of synaptic transmission. Classification of muscles. Morphophysiological characteristics of striated (skeletal) muscles. Contraction of striated muscles. Motor unit. Muscle tone and thermogenesis. Muscle work, power, and fatigue.				
Week III	Physical aspects of human work (force, power, work). Smooth muscles. Properties of gases. Ventilation. Lung volumes and capacities. Gas transport to cells. Primary and accessory respiratory muscles. Intrapleural pressure.				
Week IV	Regulation of breathing. Types and patterns of breathing. Breathing under conditions of decreased and increased atmospheric pressure.				
Week V	Blood plasma. Erythrocytes. Leukocytes. Immunity and immune bodies. Platelets. Blood coagulation and hemostasis. Blood groups. Transfusion and transplantation. Functional division of the circulatory system.				
Week VI	Morphofunctional characteristics of the cardiac muscle. Cardiac hemodynamics. Cardiac conduction system. Athlete’s heart. Recording and analysis of the electrocardiogram (ECG).				
Week VII	Regulation of cardiac muscle activity. Exchange at the capillary level. Peripheral circulation. Pulse: definition, types, and characteristics. Venous circulation. Lymph flow.				

Week VIII	Neurohumoral mechanisms of regulation of blood vessel tone. Structural and energy role of nutrients; energy sources in the human body. Anabolism and catabolism. Minerals and vitamins. Methods of studying energy metabolism; energy storage.
Week IX	Respiratory quotient. Glycogen supercompensation. Lactic acid. Basal metabolism. Energy metabolism during physical exertion. Planning a daily dietary intake. Regulation of acid–base balance. Chemical and physiological buffers. Regulation of glycemia. Regulation of calcium levels in the body.
Week X	Regulation of protein metabolism (the effect of physical activity on anabolic processes in the body). Membrane potential. Action potential.
Week XI	Laws of excitability. Neuron. Classification of synapses in the CNS. Neurotransmitters. Reflex function. Basal ganglia and formation of dynamic stereotypes.
Week XII	Cerebellum, vestibular system, proprioception, and the role of balance. Tactile and thermal reception. Visceroreception. Olfactory and gustatory reception.
Week XIII	Pain reception. Hypothalamus. Limbic structures of the brain. Cerebral cortex. Sleep. Learning and memory. Consciousness. Energy capacities and their measurement. Steady state.
Week XIV	Sports training and types of training. Stress theory, phases of stress, stressors. The role of sport and recreation according to the modern theory of functional systems in the reception and adaptation of the organism to harmful effects of stress.
Week XV	The occurrence of overtraining and its implications for athletes' functional abilities; occurrence of injuries. Chronobiology and its significance in sports.

Methods of teaching:
Lectures, exercises, case analysis, discussion, e-learning, and clinical practice.

Student workload:

weekly: 4	per semester: 60

Student obligations during the course:
Active teaching, electronic literature search, midterm exams.

Literature:
Required Literature

1. Grujić N.: Fiziologija sporta, udžbenik, Futura, Petrovaradin, 2010
2. Pećina M. i sar.: Sportska medicina, udžbenik, Medicinski fakultet, Zagreb, 2013
3. Banović D.: Povrede u sportu, udžbenik, Draslar partner, Beograd, 2006
4. Barak O. i sar.: Praktikum iz fiziologije sporta, Futura, Petrovaradin, 2006
5. Nikolić Ž.: Fizikalna terapija lokomotornog aparata, Zavod za izdavanje udžbenika i nastavnih sredstava, Beograd, 2012
6. Pećina M.: Sindromi prenaprezanja sustava za kretanje, Globus, Zagreb, 2006

Recommended Literature:

7. Costill D, Wilmore J.: Physiology of Sport and Exercise, Human Kinetics, Ravena Press, London, 2015

Course outcome (aligned with the study program outcomes):
Upon completion of the course and successful passing of the exam, the student will have mastered the general principles and rules of conduct in a sports laboratory, become familiar with basic laboratory procedures for functional testing, and acquired the skills required to perform laboratory tests. The student will be thoroughly familiar with the procedures for collecting and preparing blood and urine samples, as well as with the methods of basic laboratory analyses of blood and urine used in sports medicine practice. In addition, the student will have mastered basic electrophysiological methods, gained experience in performing recordings, is able to recognize basic recorded parameters, independently measure arterial blood pressure, perform cardiac auscultation, and determine respiratory volumes, capacities, and oxygen consumption, among other procedures.

Forms of knowledge assessment and grading:

pre-exam requirements	points	exam	points
attendance at lectures	3	exam	30
activity	7	-	-
project/seminar paper	0	-	-
exercises/professional practice	40	-	-
midterms	20	-	-
Full name of the lecturers and teaching associates:			
Lecturer:	Ivana Kaćanski, PhD, Professional Studies Professor		
Teaching Associate:	Zoran Tešić, Specialist in Applied Physiotherapy Vesna Bilafer, Teaching Associate, Master Professional Nurse		
Specific features that need to be emphasized for the course: no			
Note (if applicable): no			