

UNIVERSITY OF ZADAR
DEPARTMENT OF MEDICAL STUDIES

Professional study of nursing
Proposal of study program



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Adress: Mihovila Pavlinovića bb

Phone: + 385 23 200 534

Fax: + 385 23 200 605

rektorat@unizd.hr

<http://www.unizd.hr>

1) Introduction

Reasons for program offering

Developments of science and high technology, increase of city population and great migration in population have immense influence on modern lifestyle. Therefore individuals, families and whole communities are confronted with challenges that reflect both on their health and on the healthcare system.

At the beginning of the third millenium the most common diseases are chronic and non-infectious diseases, malignant diseases and traumas, but also increased number of new infectious diseases.

High technology standards are being introduced into the course of treatment and nursing care and it has become evident that applying of high technology and overuse of medications often lead to dehumanizing, which is a typical characteristic of healthcare systems in highly developed countries.

As counterbalance to such dehumanizing in the last decades, WHO initiated a movement directed towards health and health promotion. The most important aims of the project " Health for Everyone by 2010" are health promotion and health maintenance through knowledge, free decision-making and responsibility as well as provision of quality life conditions in sickness and in health (WHO – European Health 21 – WHO Regional Commitee for Europe, Copenhagen, 1998).

One of the most important WHO recommendations is to accomplish the Aim 18- Development of Human Resources in Healthcare: "By 2010 all healthcare providers, working both within healthcare systems and in related areas, will have to master suitable knowledge, attitudes and competences in order to protect and promote health in all EU Member States." In this document the emphasis has been put to lifelong education of all healthcare careers. In 2000 WHO issued Munich Declaration to set directions for future education of nurses.

Following the principles of the Munich Declaration , the curricula should be adapted to suit the needs of the profession and have to be submitted to quality control and evaluation, which leads to conclusion that Croatian system of education of nurses needs careful reconsideration and comprehensive reform.

Purpose estimate as regards the labour market needs

Future healthcare system reform will include: hospital categorization, ward categorization, healthcare standards, different types of health insurance etc., which will require different profiles of nurses.

According to WHO and EU recommendations and standards, all levels of healthcare system require professional, educated nurses.

To suit these demands, Croatian healthcare system needs both qualified nurses with basic competences and knowledge as well as highly educated nurses (university level) to work in management, public health and education (self-reproduction). Between the two levels (qualified nurse assisting physicians – nurse with BSc in Nursing, university degree in nursing) there is space for other education possibilities and courses, especially when it comes to complex specialties in nursing care. Education programs as well as development of nursing as a profession have to be adapted to world standards.

Estimate of justifiability of the professional study of nursing in Zadar

The city of Zadar is a territorial and medical centre of the northern Dalmatian region, that the Zadar, Šibensko-Kninska and Ličko-Senjska Counties gravitate to, and which, according to the latest estimates, has around 400 000 inhabitants. Inside this region there are the following medical institutions: General Hospital Zadar, General Hospital Šibenik, General Hospital Gospić, Specialist Orthopedic Hospital Biograd na moru, Specialist Psychiatric Hospital Ugljan, Institutes of the Public Health, and Medical centres. In all the medical institutions in all three counties there are approximately 2000 nurses employed with finished secondary education, and approximately 160 nurses with finished college of nursing. The number of employed nurses in health system in this region, the ratio of nurses with finished high school and college, systematization of work places of the Ministry of Health, according to which there are approximately 2000 nurses with finished college missing in the Croatian health system, as well as generally accepted attitude on balance and multicentric development of the Republic of Croatia, lead to an unquestionable conclusion on permanent need of the professional study of nursing.

By founding of the University, which is the oldest University at the Croatian territory, founded in 1396, Zadar has got the possibility to establish the study of nursing in the university framework inside the Department of Medical Studies, based on the tradition of humanities and social sciences in Zadar. Thus can the medical studies find their place at the University again.

In contribution to that we can mention a rich tradition of medicine in our town:

- The first faculty of medicine in Croatia was established in Zadar in 1806

- The first school of midwives in 1821
- The first Red Cross organization in 1878

There is quite an interest expressed for this study by the nurses in our County, which is in any case a positive direction, that follows the needs of our medical institutions for educated staff in healthcare.

2) General section

2. 1. Study name

Professional study of nursing.

2. 2. Study provider

University of Zadar

2. 3. Study duration

Three years (six semesters). The curriculum content of the program is worth 180 ECTS credits

2. 4. Admission requirements

Completed four year secondary school program and successfully taken entrance examination in subjects Human Anatomy, Physiology and Nursing Care. The optimal number of students is determined by the Senate of the University of Zadar

Entrance examination follows the procedure determined by the Senate of the University of Zadar

2. 5. Educational aims of the program and competencies acquired at the end of the study

After graduation the students will acquire knowledge and competences necessary to provide high quality nursing care and they will be capable of:

- providing nursing care respecting client's individuality and employing holistic approach and partnership
- applying nursing care process; which includes assessment of the client's needs, setting the goals and determining priorities, planning and implementing adequate procedures, evaluating the process and if necessary modifying the nursing care plan
- keeping nurse's notes and evaluating the results
- organizing nursing care for different clients in various types of healthcare settings as well as in their homes and supervise its implementation
- monitoring the growth and progress of an individual throughout the life periods and taking effective health promotion strategies
- applying the acquired knowledge and skills for health promotion and health maintenance of an individual, family and community

- assessing educational needs and applying the principles and teaching methods to an individual, family and community
- establishing successful communication with clients, their families, team members and others
- maintaining healthy and safe environment and preventing all risks for the client
- applying acquired knowledge and skills for monitoring health condition of patients and life-threatened individuals and intervening within their responsibilities
- participating in planning and implementing diagnostic and therapeutic procedures ordered and supervised by a physician
- acting as a part of a healthcare team at all levels of health services as well as being a member of a multi-disciplinary team
- managing a nursing care team, organizing and managing nursing service at all levels of health care system
- promoting professional attitude and responsibility, respecting the law and ethical norms
- contributing to improvement of nursing care standards
- recognizing personal needs for further education, keeping up to development of related sciences and applying the acquired knowledge in the profession, following the research in nursing and participating in it
- participating in education of nurses, other healthcare professionals and if necessary other people.

2. 6. Opportunities for further education

Completion of this program offers opportunity for further education in one of specialist programs in health sciences.

2. 7. Qualification awarded for successful completion of the program

Bachelor of Science in Nursing Degree.

3. Program description

Table 1. Curriculum content of undergraduate program BSc in Nursing (in alphabetic order)

	COURSE	L	S	P	Total	ECTS
1.	Anatomy and physiology	45	0	15	60	5
2.	Basics of healthcare	30	0	0	30	3
3.	Basics of research work in nursing	30	15	0	45	3
4.	Biophysics, biochemistry and basics of radiology	30	0	15	45	3
5.	Clinical medicine I	30	0	15	45	3
6.	Clinical medicine II	30	15	0	45	3
7.	Clinical medicine III	15	0	30	45	4
8.	Clinical medicine IV	45	0	45	90	6
9.	Clinical medicine V	45	0	15	60	4
10.	Clinical propedeutics	60	0	0	60	5
11.	Communicative skills	30	0	0	30	3
12.	Coordination and supervision of healthcare	65	0	0	65	5
13.	Dietetics	45	0	0	45	3
14.	Epidemiology	30	0	15	45	3
15.	Foreign language	30	0	15	45	3
16.	Health psychology	15	0	30	45	3
17.	Healthcare in community	45	0	60	105	6
18.	Healthcare of child	30	15	15	60	3
19.	Healthcare of adults I	30	0	15	45	3
20.	Healthcare of adults II	30	15	30	75	3
21.	Healthcare of geriatric patients	45	30	120	195	11
22.	Healthcare of mother and newborn baby	30	0	0	30	3
23.	Healthcare of people with special needs	15	0	0	15	2
24.	Healthcare of psychiatric patients	45	30	120	195	12
25.	Healthcare process	30	0	0	30	2
26.	Information technology and administration in healthcare	30	0	0	30	2
27.	Methods of health education and health promotion	30	0	30	60	8
28.	Microbiology with parasitology	45	0	110	155	10
29.	Optional course	30	0	75	105	6
30.	Pathology	30	0	110	140	10
31.	Pathophysiology	75	0	170	245	13
32.	Pharmacology	45	0	90	135	9
33.	Philosophy and bioethics in healthcare	20	10	15	45	3
34.	Public health	45	0	90	105	7
35.	Social and health legislature	60	0	60	120	5

36.	Sociology	30	0	15	45	3
37.						5
	TOTAL	1315	130	1320	2735	185

	OPTIONAL COURSES	P	S	V	Total	ECTS
1.	Biological basis of behaviour	15		15	30	2
2.	Tourist medicine	15		15	30	2
3.	Developmental psychology	15		15	30	2
4.	Medical Geography	15		15	30	2
5.	Psychology of pain	15		15	30	2
6.	Work with a group in nursing	15		15	30	2
7.	Medical Demography					

3. 2. Curriculum for each course (alphabetic)

3. 2. 1. ANATOMY AND PHISIOLOGY

First year, Semester I, Lectures – 45; Practicum – 15; Total 60

Course aims:	Student will be introduced to the fundamental morphology and functioning of certain organs and organ systems. Acquired knowledge of anatomy and physiology should allow better understanding of pathophysiological and pathological processes in the body, as well as mastering clinical medicine courses and procedures of nursing care.
Course content:	<p>The course includes acquiring knowledge of fundamental anatomy and physiology, together with the knowledge from the fields of structure and function of certain organ systems.</p> <p>General anatomy and functional organisation of human body, structure and function of locomotory system (bones, joints, muscles) electrophysiology (membranous and action potential), blood cells, immunity, and blood coagulation, structure and function of vascular system (heart, blood and lymphatic vessels), structure and function of respiratory system, structure and function of uropoietic system, structure and function of digestive system, metabolism, structure and function of endocrine glands, structure and function of reproductive system, structure and function of nervous system, senses.</p>
Exam:	Oral and written
ECTS	5
Reading list:	<p>Required readings:</p> <p>Keros P., Pećina M., Ivančić-Košuta M.: Temelji anatomije čovjeka, Medicinska biblioteka, Zagreb 1999.</p> <p>Guyton & Hall.: Medicinska fiziologija, deseto izdanje, Medicinska naklada Zagreb, 2003. (selected chapters)</p>

3. 2. 2. BASICS OF HEALTHCARE

First year, Semesters I, Lectures – 45; Seminars 30; Practicum 90; Total 165

Course aims:	<p>Introduce a student to chosen vocation; to fundamental theories and concepts of nursing; to the role of a nurse in healthcare and society; professional role and function of a nurse; organisation of nursing; to enable the student to implement nursing practice skills.</p> <p>After completion of the course a student will be able to explain the fundamental values nursing is based on.; to describe and explain the responsibilities of registered nurse; to describe and explain what nursing care is, to describe and explain cultural, spiritual and other parameters influencing nursing and healthcare system; to describe, explain, assess and determine patients needs according to V Henderson's 14 needs; and to provide nursing care and/or conditions in fulfilling those need; to apply and keep nurse's notes; to describe and explain organisation of nursing care and</p>
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	a way of providing nursing care; to describe, explain and provide nursing care for disabled people; to implement nursing practice skills.
Course content:	Defining nursing as independent profession. Theories, models and healthcare practice. Organisation and responsibilities of registered nurse (individually and in a team). Basic human needs and their relation to healthcare. The basics of organisation and providing nursing care within a healthcare system and community. Nursing care for special groups. Nurse's notes. Historical development of nursing. Nursing practice skills. Basics of general nursing care.
Exam:	Written, oral and practical
ECTS:	11
Reading list:	<p>Required readings:</p> <p>Fučkar, G. Proces zdravstvene njege. Medicinski fakultet Sveučilišta u Zagrebu. Zagreb, 1992. (selected chapters).</p> <p>Fučkar, G. Sestrinske dijagnoze. HUSE. Zagreb 1992. (selected chapters)</p> <p>Henderson, V. Osnovna načela zdravstvene njege. HUSE i HUMS, Zagreb 1994.</p> <p>Recommended readings:</p> <p>Sorensen, K.C. Luckmann, J. Basic nursing a psychophysiologic approach. W.B. Saunders Company Philadelphia, 1994.</p> <p>Rosdahl, C.B. Textbook of basic nursing. J.B. Lippincott Company, Philadelphia 1995.</p> <p>Appling, S.E. et al. Handbook of nursing procedures. Springhouse: Springhouse Corporation, 2001.</p>

3. 2. 3. BASICS OF RESEARCH WORK IN NURSING

Third year, Semester VI, Lectures – 30 ; Seminars – 15; Practicum – 30; Total: 75

Course aims:	To acquire basic knowledge of research methodology and usage of statistical methods and procedures. This will enable the student to monitor and evaluate the results of his/her own work; to conduct simple professional research; to follow professional literature; to contribute to understanding of information important for performing daily tasks in assessing and monitoring health condition of groups and community.
Course content:	<p>Research methodology:</p> <p>Research approach; overview of research process, sources and kinds of data, particularity of data connected to nursing; choice of measuring criteria; characteristics of measuring procedure, processes of collecting data (systematic monitoring, measuring, assessing criteria, interview, survey, questionnaire, tests), professional literature resources, reports on research results.</p> <p>Statistics:</p> <p>Basic concepts of probability, arithmetic mean, mean value, dominant value,</p>

	standard deviation and variability index, arithmetic mean deviation, normal distribution, standard results (z-value), statistical significance in differences between various data groups (t-test and hi2 - test for various types of data), data correlation.
Exam:	Written and oral
Lecturers:	4
Reading list:	<p>Mejovšek, Milko (2003.): Uvod u metode znanstvenog istraživanja u društvenim i humanističkim znanostima, Jastrebarsko, „Naklada slap“; 1. dio – Poglavlja: od 1. do 4. (od 17. do 114. stranice)</p> <p>Petz, Boris (1997.): Statistika za praksu, Zagreb, Ministarstvo unutarnjih poslova Republike Hrvatske, Sektor za kadrovske, pravne i obrazovne poslove.</p> <p>Marušić, M. Uvod u znanstveni rad, Medicinska knjiga, Zagreb, 2003. (treće izdanje)</p> <p>Wise,J. Leading and Managing in Nursing,Mosby, 1999. (86 – 108;226 – 273;</p>

3. 2. 4. BIOPHYSICS, BIOCHEMISTRY AND BASICS OF RADIOLOGY

First year I, Semester I, Lectures – 30, Total 30

Course aims:	<p>Students learn about biophysical and biochemical principles of basic body functions, from molecular level to the level of organs and the whole body. Students acquire basic knowledge of making diagnosis in radiology.</p> <p>To enable the student to realize the connection between the physical laws and function of biological system; to enable the student to understand how the radiographic images are made what they show and the difference between them.</p> <p>To introduce the student to the basic knowledge of chemical structure, biochemical and energetic changes, and the regulation of metabolic processes in the body of a healthy human.</p>
Course content:	<p>Students should know the principles of work of the senses, circulatory system and lungs, as well as the strain of biological materials, especially strain of joints depending on posture and movement. Student should be able to recognize an obvious handicap and needed aid, to know which posture causes great strain of certain joints, how to correctly lift and carry load, and how to use the aids while walking. Further, student should be able to recognize the difference between radiogram and scintigram, echogram and an image made using magnetic resonance or computer tomography. Also, how are those elementary images of methods of medical diagnostics made, what they present, and what they are used for. Student should understand the fundamental principles of biochemistry which can be applied in medicine, and how to analyse path biochemical processes into basic biochemical characteristics.</p>

Exam:	Written and oral
ECTS:	3
Reading list:	<p>Pope JA: Medical Physics (2. edition). Heinemann, Oxford, 1998.</p> <p>Eterović D: Priručnik za vježbe iz biofizike, Katedra za biofiziku i znanstvenu metodologiju MF Split (šk. god. 1999./2000.)</p> <p>Eterović D: Fizikalne osnove slikovne dijagnostike, u: S. Janković i D. Eterović: Fizikalne osnove i klinički aspekti slikovne dijagnostike, Medicinska naklada, Zagreb, 2002.</p> <p>Božidar Štraus. Medicinska biokemija. Medicinska naklada, Zagreb, 1992</p>

3. 2. 5. CLINICAL MEDICINE I

3. 2. 5.1. CLINICAL MEDICINE

Second year, Semester IV, Lectures - 20

Course aims:	To master the course content from clinical medicine (cardiology, gastroenterology, endocrinology, clinical immunology, rheumatology, nephrology, pulmology, special review of emergency conditions in clinical medicine.
Course content:	The most significant diseases of the following systems are discussed: circulatory, respiratory, digestive, urogenital, endocrinological, hematopoietic and locomotor, from the aspect of ethiology, clinical picture, course of illness, diagnostic investigation, treatment, prognosis and complications. Oncology. Geriatrics. Emergency conditions.
Exam:	Written and oral
ECTS:	2
Reading list:	<p>Vincelj, J., Selected chapters iz kardiovaskularnih bolesti. Školska knjiga Zagreb, 1998.</p> <p>Čučević, B., Selected chapters iz pulmologije –nastavni tekstovi. VZŠ, Zagreb, 2002.</p> <p>Morović-Vergles, J., Selected chapters iz kliničke imunologije, reumatologije i alergologije – nastavni tekstovi, VZŠ, Zagreb, 2002.</p> <p>Vrhovac, B. i sur. Interna medicina. Naklada Ljevak Zagreb, 2003.</p>

3. 2. 5.2. INFECTOLOGY

Second year, Semester IV, Lectures - 15

Course aims:	To learn about the basic principles of occurrence and transmission of infectious diseases. To learn and understand the pathogenesis of infectious diseases, path histological changes which lead to symptoms of infectious diseases, to recognize general and specific symptoms of infectious diseases, to know the clinical picture in details, laboratory diagnostics,
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	treatment and preventive measures of the most common infectious diseases.
Course content:	Mastering the course means previous knowledge from pathology and pathophysiology, pharmacology, epidemiology, and especially microbiology. Students should get systematic and modern insight in basic problems of modern acute infectious diseases, and their presence in all branches of medicine.
Exam:	Written and oral
ECTS:	1,5
Reading list:	Beus I., Škerk V., Infektologija za stomatologe, Graphis, Zagreb 2002. Kuzman I., Schonwald S., Infektologija za medicinske sestre, Medicinska naklada, Zagreb, 2000.

3. 2. 5. 3. NEUROLOGY

Second year, Semester IV, Lectures - 15

Course aims:	<p>Students will be introduced to the nature of occurrence, diagnostics, treatment and possible consequences of neurological diseases and conditions. Knowledge according to epidemiological indicators of the most common neurological problems of Croatian population, possible successful prevention, and taking care of emergency conditions, where the postponed health provision will endanger life itself, its quality, or cause disability of the patient.</p> <p>Knowing the neurological stage of disorder, to recognize the importance of organisation and function of central and peripheral nervous system.</p> <p>To show the organisation, function and importance of neurological services: from emergency neurological surgery, specialists' conciliatory surgery to neurological department.</p> <p>To show the place, the role and the importance of a registered nurse and an orderly in improving the efficiency and quality of successful treatment.</p> <p>To implement the knowledge of modern management in effective prevention and treatment of neurological diseases, conditions and their consequences.</p>
Course content:	<p>To learn about central and peripheral nervous system of a human, its anatomy, physiology, organisation and function.</p> <p>The causes of neurological diseases, life habits, risk factors, and how to prevent them.</p> <p>Diagnostics of neurological diseases, disorders and conditions, especially in the work of a registered nurse and an orderly. Equipment and techniques used in diagnostics.</p> <p>Neurological diseases as one of the main causes of death in Croatia and Europe. Emergency conditions in neurology. Other neurological diseases. Treatment methods and usage of medicine in neurology. Neurology and border areas.</p>

	Part of accidents at work and professional diseases in neurological disorders.
Exam:	Written and oral
ECTS:	1,5
Reading list:	Brinar, V. i sur. Neurologija, Školska knjiga, Zagreb, 1994.

3. 2. 5. 4. DERMATOLOGY

Year 2, Semester IV, Lectures 10

Course aims:	To allow the student to learn about the most important disorders of skin and subcutaneous tissue which a nurse needs when assessing the health condition of a patient, the needs for healthcare and participation in a process of diagnosis and treatment.
Course content:	Introduction to venereal diseases, skin built, basic knowledge of efflorescences, basic data from dermatological anamnesis and status, overview of basic data of diagnostic methods in dermatology, the basics of dermatological therapy, efflorescences, fundamentally about the models of skin disorders occurrence, parasitic diseases, piodermatosis, more common virus skin diseases, skin tuberculosis, dermatomycosis, seborrhoean group of dermatosis, hair and scalp disorder, bulimic dermatosis, connective tissue diseases, pigmentation disorder, keratinisation disorder, hypersensitivity to medicine, urticational group of diseases, contact dermatitis, consequences of chronic vein insufficiency of lower limbs, dermatological oncology, sexually transmitted diseases. Basic data about organising the work in dermatovenerology and a role of a nurse, nurses diagnosis and intervention – introduction, some nurses diagnosis and interventions in dermatology, applying local therapy in dermatology, local administration of glucocorticoids, administering occlusive bandage.
Reading list:	Dobrić I. i sur. Dermatovenerologija. Zagreb: Grafoplast, 1999.

3. 2. 6. CLINICAL MEDICINE II

3. 2. 6. 1. PAEDIATRICS

Year II. Semester III, Lectures 30, Total: 30

Course aims:	Mastering the course student will: have knowledge, skills and attitudes in assuring the optimal growth and development of children and especially the role of a nurse in realizing that aim; recognise the importance of the factors which influence that growth in positive and negative way, and to discover the disorders and diseases that prevent growth; be able to implement holistic approach to healthy and unhealthy child; special emphasis is put on the role of a nurse in individual and team approach in prevention of diseases and helping sick child
Course content:	In the course the emphasis is put on all stages of child's development:

	<p>from its conceiving, antenatal and postnatal period to adolescence. To accept the thesis of the Convention on children's rights that the child is a person until the age of 18. Along with normal development and its deviation, the approach and providing help to ill child is taken especially into consideration in the sense of recognizing disease, that is, to prevent the possible complications and consequences.</p> <p>The importance of communication and respect to the child and its parents is emphasised, especially in prevention and treatment of children, as well as creating positive surroundings in institutions which provide health care for children (out-patients departments and hospitals)</p>
Exam:	Written and oral
ECTS	3
Reading list:	<p>Mardešić, D. i sur. Pedijatrija, Školska knjiga, Zagreb, 2000. – odabrana područja</p> <p>Švel, I. i Grgurić, J. zdravstvena zaštita djece, Školska knjiga, Zagreb, 1996. – odabrana područja</p> <p>Švel, I. i Grgurić, J. Zdravstvena zaštita kronično bolesnoga djeteta, Barbat, Zagreb, 1998 - odabrana područja</p> <p>Audy – Kolarić, Lj i sur. Anestezija i intenzivno liječenje novorođenčadi, Školska knjiga, Zagreb, 1994 – odabrana područja</p> <p>Audy – Kolarić, Lj i sur. Hitna stanja u pedijatriji, Školska knjiga, Zagreb, 2001 – odabrana područja</p>

3. 2. 7. CLINICAL MEDICINE III

Third year, Semester V, Lectures - 45

3. 2. 7.1. SURGERY

Third year, Semester V, Lectures – 20, Total: 20

Course aims:	<p>After completion of the course student will acquire the basic knowledge of surgical diagnosis and therapy. The knowledge will consist of understanding anatomical and physiological concepts of surgical practice. Student will get the insight into symptomatology, pathology and pathophysiology, diagnostics and therapy of the main surgical diseases; student will be able to apply basic skills of recognizing symptomatology and signs of surgical diseases; i.e. basics of physical examination of a patient and recognition of basic symptoms. The aim of acquiring knowledge and skills is to be able to collect reliable and relevant data in process of a patient's treatment, and to participate in a process of surgical treatment.</p>
Course content:	<p>The emphasis is put on acquiring medical knowledge of surgery as a profession and of fundamental concept of surgical treatment of patients. Students will get the insight into history of surgery as a profession; they will revise their knowledge from anatomy and pathophysiology of surgical diseases. Students will acquire knowledge and skills of methodology and practice of recognizing, i.e. diagnosis of surgical diseases, and of ways of surgical treatment (basic principles as well as specific procedures in</p>

	particular branches of surgery). Course includes basic surgery in otorhinolaryngology and ophthalmology.
Exam:	Written and oral
ECTS:	2
Reading list:	Bradić I. i sur. Kirurgija. Medicinska knjiga, Zagreb, 1995. Prpić, I. Kirurgija za medicinare, Školska knjiga Zagreb, 1995. Prpić, I. Kirurgija za više medicinske škole. Medicinska naklada, Zagreb, 1996.

3. 2. 7. 2. GYNAECOLOGY AND OBSTETRICS

Third year, Semester V, Lectures – 15, Total: 15

Course aims:	Students should become relevant, serious and active participants in daily gynaecological and obstetric practice, where they could do their part of work with understanding.
Course content:	Basic concept: physiology of menstrual cycles, pregnancy and delivery, with their most common disorders and pathophysiological mechanisms. Path morphology of reproductive organs. Gynaecological and obstetric examination.
Exam:	Written and oral
ECTS	2
Reading list:	Službeni udžbenik ginekologije i opstetricije za više medicinske sestre Randić Lj, Andolšek L. Planiranje obitelji – izabrana poglavlja. Otokar Keršovani, Rijeka, 1984. Dražančić A. i sur. Porodništvo – izabrana poglavlja. Školska knjiga, Zagreb, 1994. Šimunić V. i sur. Ginekologija – izabrana poglavlja. Medicinska biblioteka, Zagreb, 2001. Recommended readings: Pschyrembel: Praktična opstetricija

3. 2. 7. 3. OTORHINOLARYNGOLOGY

Second year, Semester IV, Lectures - 5

Course aims:	Student will acquire knowledge of the most significant diseases of ear, nose and throat, from the aspect of recognition and treatment, which is needed for assessment of patient's health condition and healthcare needs, as well as for participating in a process of diagnosis and treatment.
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Course content:	<p>Otology – infection of outer, middle and inner ear, endocranial and exocranial complication of chronic middle ear infections, paresis, kinds of hearing impairment, and their causes, degenerative diseases of middle and inner ear, tumours, traumas.</p> <p>Rhinology – nose and sinuses infections, allergic aspects of nose and paranasal sinuses, sinobronchial and bronchosinus syndrome, nose trauma, malformations of nasal partition., epistaxis, REKAS;</p> <p>Pharyngology – infections of pharynx, throat, tumours, Plummer-Winsonov syndrome, foreign bodies, ecological aspect of pharynx diseases, interdisciplinary approach to chronic impediment in pharynx and throat, phoniatic problems</p> <p>Emergencies in Otorhinolaryngology - tracheotomy, care of a patient with tracheotomy, conicotomy, first aid, Heimlich manoeuvre, stronger bleedings, chocking.</p>
Reading list:	Mladina, R. Otorinolarinologija za srednje i više medicinske škole. Zagreb: Školska knjiga, 1995.

3. 2. 7. 4. OPHTHALMOLOGY

Second year, Semester IV, Lectures - 5

Course aims:	Students acquire knowledge of most significant eye diseases, which a nurse needs for assessing patient's health condition, healthcare needs and for participating in a process of diagnosis and treatment.
Course content:	Orbit and eye adnexa, tear ducts; diseases of conjunctiva, corneal diseases, choroidal diseases, scleral diseases – application of midriatic, antibiotic, and steroids locally, drops, ointment , sub conjunctive infections; diseases of lens and vitreous body – cataract, diseases of retina, diseases of optic nerve, glaucoma, eye anomaly refraction, strabology, eye injuries.
Reading list:	Agbaba, M. i sur. Oftamologija. Zagreb: JUMENA, 1988.

3. 2. 8. CLINICAL MEDICINE IV

3. 2. 8. 1. MENTAL HEALTH AND PSYCHIATRY

Third year, Semester V, Lectures – 30, Total: 30

Course aims:	To acquire knowledge of recognizing psychopathology (altered states of consciousness, communicative disorders, attention deficit, perceptual disorders, psychomotorical disorders, thinking disorders, mood and affects disorders, volition disorders, mnemonic and intellectual disorders, instinctive disorders, remembrance and memorization disorders), and knowledge of ordering psychical disorders into main diagnostic groups (organically caused psychical dysfunctions; psychical disorders caused psychoactive substances; schizophrenics, and similar disorders; mood disorders; anxiety disorders, disorders due to stress, sleeping disorders, and eating disorders; pervasive
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	<p>development disorders, personality disorders, disorders connected to period of childhood and adolescence.</p> <p>To acquire specific approach to patient with psychic disorders (approach to psychotic patient; maniacal patient; depressive patient, deliria patient, dementia patient; anxious patient; aggressive patient, suicidal patient)</p> <p>To define nurse's role in work with patients suffering from psychical disorders and psychical complaints.</p> <p>To define possible predictors of psychical disorders.</p>
Course content:	<p>Introduction to psychiatrics, basics of psychopathology, spiritual disorders of organic background, mental and behavioural disorders due to use of psychoactive substances. Schizophrenics, schizoid and other frantic disorders, affections disorders, mood disorders, personality disorders, neurotic disorders due to stress. Mental retardation, disorders of psychological development, behavioural and emotional disorders in child's period and adolescence. Urgent conditions in psychiatry. Modern organisation of psychiatric services. Basics of different approaches in psychiatry, psycho pharmacotherapy. Social and juridical status of mentally ill patients and their rights.</p>
Exam:	Written and oral
ECTS	3
Reading list:	<p>Jakovljević, M. Psihijatrija za studente Visoke zdravstvene škole. Samobor; A. G. Matoš, 2003.</p> <p>Moro, LJ., Frančičković, T. "Psihijatrija" Udžbenik za više zdravstvene studije; i suradnici; Udžbenici Sveučilišta u Rijeci, 2004.</p>

3. 2. 9. CLINICAL MEDICINE V

3. 2. 9. 1. ANAESTHESIOLOGY, REANIMATION I INTENSIVE TREATMENT

Third year, Semester VI, Lectures – 30 Total: 30

Course aims:	<p>After completion of the course student should understand the basics of intensive treatment in order to participate in the work of medical team; practically perform basic skills of reanimation.</p>
Course content:	<p>The emphasis is put on the nurse's role in emergencies. The course contains themes from the fields of anaesthesiological procedures; work of anaesthesiological team, principles of reanimation; pathophysiological conditions which need intensive treatment, as well as pharmacological basics in intensive treatment.</p>
Exam:	Oral, Practical
ECTS:	3
Reading list:	<p>Required reading:</p> <p>Husedžinović, I., Barišin, S. Skripta iz urgentne medicine (hitna stanja)</p>

1998.

Valent, V. Urgentna medicina – prehospitalni postupak 1995.

Husedžinović, I. poslijediplomski tečaj stalnog medicinskog usavršavanja «Anestezija kardijalnog bolesnika u općoj kirurgiji» 2003.

Recommended reading:

Handley AJ, Monsieurs KG, Bossaert LL. Smjernice 2000. za Osnovno održavanje života odraslih (Adult Basic Life Support) Europskog vijeća za resuscitaciju (ERC). Resuscitation 2001; 48: 199-205.

Kenneth AA et al. Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiac Care, JAMA 1992; 268 (16): 2135-2281.

Hinds CJ, Watson D. Intensive Care, 2nd Ed. London, WB Saunders Company Ltd., 1996.

3. 2. 11. CLINICAL PROPEDEUTICS

Second year, Semester III, Lectures – 30, Practicum – 15, Total: 45

Course aims:	To introduce a student to basic skills of propedeutics, aimed anamnestic and diagnostic procedures of diseases or injuries of different organs and systems.
Course content:	The emphasis is put on specific contents connected to basic skills of propedeutics, determining the status, and basics of making a diagnosis which are important to a nurse for following patient's condition.
Exam:	Written and oral
ECTS	3
Reading list:	Čustović, F.: Anamneza i fizikalni pregled, Školska knjiga, Zagreb, 2000. Metelko, Ž., Harambašić, H. i sur. Internistička propedeutika i osnove fizikalne dijagnostike, Medicinska naklada, Zagreb, 1999.

3. 2. 12. COMMUNICATIONAL SKILLS

First year, Semester I, Lectures – 15, Practicum- 30, Total: 45

Course aims:	Students learn about basic principles of human communication and importance of communication with patients in preventing, diagnosis, therapy and rehabilitation. To improve students' skills of communication with different categories of patients and members of healthcare team.
Course content:	The definition of communication, forms of verbal and nonverbal communication, preventive, diagnostic and therapeutic role of communication with patient and his/her family, basics of successful communication, the role of sympathy and empathy in communication with patients, basics of individual and group communication, causes of poor communication between a nurse and a patient, influence of communication on following the advices and instructions, possibility of improving

	communication, ways of overcoming obstacles in communication, communication with patients suffering from certain psychic conditions (depressed patient, anxious patient, patient in great pain, suicidal patient, dying patient), ways of telling bad news, way of conducting psychological preparation for invasive and surgical procedures, communication with patient's family in situations of acute injuries and serious chronic diseases, communication with family of deceased patient.
Exam:	Written and oral
ECTS:	3
Reading list:	Kathleen K. Reardon (1998.): Interpersonalna komunikacija – Gdje se misli susreću, Zagreb, „Alineja Havelka Mladen (1998.): Zdravstvena psihologija, Jastrebarsko, „Naklada slap“; - 2. Poglavlje: (od 27. do 42. stranice)

3. 2. 13. COORDINATION AND SUPERVISION OF HEALTHCARE

Third year, Semesters V, Lectures – 45; Practicum– 45; Total: 90

Course aims:	After completion of the course student will be able: to assess healthcare quality with criticism and to determine possible changes at local and national level; to assess system of informing quality of patient; to assess and implement ethical and legal principles in healthcare; to assess the implementation of recommended skills/algorithms and to realize needs for possible changes; to develop systems of self evaluation and evaluation of work of an individual; to systematically assess needs for professional staff, together with healthcare needs
Course content:	Clinical supervision; Learning and developing strategies of clinical supervision; Analysis of skills and evaluation of nursing; Managing human resources; Planning and supervising healthcare implementation; Team building; Theories of changes and managing changes; Managing healthcare quality; Managing risks; Improving work at working place; mentor, researcher, teacher, etc.; Influence of political and economic factors on work organisation
Exam:	Written and practical
ECTS:	6
Reading list:	Bond,M, Holland, S: Skills of Clinical Supervision for Nurses, Buckingham, Open University press, 1998. Hogg,C. Patients, Powers and Politics, Sage Pubs, Ltd., 1999. Čulig, J. Nastavni tekstovi – Menadžment u sestriinstvu. Visoka zdravstvena škola, 2003. Čulig, J. Zovko, V. Priručnik za procjenu radnog učinka, ZZJZ, Zagreb, 2002.

3. 2. 14. DIETETICS

First year, Semester I, Lectures - 30; Practicum – 15; Total 45

Course aims:	The student should be able to understand the fundamental principles of modern diet, also to introduce the student to specific nourishing needs of particular population or group.
Course content:	To introduce the student to a way of appropriate diet; preventive and clinical approach to appropriate diet; to master the methods for assessing the state of being nourished; measures for assessing and improving nutrition; public health aspects of eating disorders, nutrition deficit, and the diseases caused by excessive food intake; evaluating and improving nutrition in a society; nutrition in special conditions
Exam:	Written and oral
ECTS:	3
Reading list:	<p>Required readings:</p> <p>Matasović D. Hrana, prehrana i zdravlje. FOVIS, Zagreb, 1992 (selected chapters)</p> <p>Sadler M. ur. Encyclopedia of Human Nutrition. Academic Press Books, London, 1998 (sinopsisi odabranih poglavlja)</p> <p>Kaić-Rak A. i Antonić K. Tablice o sastavu namirnica i pića. Zavod za zaštitu zdravlja SR Hrvatske, Zagreb, 1990</p> <p>Turčić V. HACCP i higijena namirnica, Zagreb; VT 2000</p> <p>Živković R. Dijetoterapija. Zagreb, Naprijed, Zagreb, 1994</p> <p>Živković R. Dijetetika, Zagreb; Medicinska naklada, 2002</p> <p>Kapetanović T. i suradnici: Prehrana djece predškolskog uzrasta-normative i jelovnici. Savez samostalnih zajednica društvene brige o djeci predškolskog uzrasta , 1986</p> <p>Simić B. Medicinska dijetetika, Medicinska knjiga, Zagreb, 1977</p> <p>Valić F i sur.: Zdravstvena ekologija, Zagreb, 2000.</p> <p>Dakić B.: Prehrana bolesnika, Zagreb, Hrvatski farmer, 1995.</p> <p>Kaić-Rak A.: Prehrana pučanstva u izvanrednim i ratnim uvjetima, Zagreb, Medicinski fakultet, 1991.</p> <p>Recommended readings:</p> <p>Clark N. Sportska prehrana. Robert Schwarz “Gopal” d.o.o. Zagreb, 2000.</p> <p>Kapetanović T. I suradnici Prehrana djece predškolskog uzrasta-normative I jelovnici. Savez samostalnih zajednica društvene brige o djeci predškolskog uzrasta , 1986</p>

3. 2. 15. EPIDEMIOLOGY

First year, Semester II, Lectures – 30; Practicum 15; Total - 45

Course aims:	To broaden nurses' knowledge in the field of infectious and non-infectious chronic mass diseases. The main aim is the analytical approach to certain epidemiological entity, setting the cause of particular disease, its recognition, critical review of preventive measures, and finally, the use of best prophylactic measures to put the disease under control.
Course content:	<p>In the part of general epidemiology the emphasis is put on epidemiological concept and epidemiological measuring in order to understand and to apply them as required. Primary and secondary segment of prevention from infectious diseases, together with non-infectious diseases' preventive measures are the main issues of the general epidemiology.</p> <p>Special epidemiology contains the most significant parts in the area of infectious and non-infectious diseases.</p>
Exam:	Written and oral
ECTS:	3
Reading list:	<p>Required reading: Babuš, V. i sur. Epidemiologija, Medicinska naklada, Zagreb, 1997.</p> <p>Recommended reading: Ropac, D. i sur. Epidemiologija zaraznih bolesti, Medicinska naklada, Zagreb, 2003.</p>

3. 2. 16. FOREIGN LANGUAGE

First and second year, Semesters I, II, III and IV, Seminars – 60; TotalUkupno 60

Course aims:	Basic aim of foreign language course it to learn about and master basic medical terms used in various healthcare professions.
Course content:	The course includes general grammar of chosen foreign language (English, German, and French), morphology, and basics of medical terms. Organ systems, the most common diseases, particular terms from oncology, pharmacology and psychiatry are discussed.
Exam:	Written and oral
ECTS:	4
Reading list:	<p>English language: Momčinović, V., Tanay, V., Žurić-Havelka, S.: Medical English, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb, 1992.</p> <p>German language: Tomažić, Lj.: Izbor stručnih tekstova, H. Birkenfeld i M. Roschenck: Medizin 1 i Medizin 2, Max Huber Verlag, München, 1990.</p> <p>French language: Devčić. I. Francuski jezik za studenta Visoke zdravstvene škole, skripta,</p>

3. 2. 17. HEALTH PSYCHOLOGY

First year, semester II, Lectures - 30, Practicum 15, Total 45

Course aims:	<p>To emphasise the importance of complete approach to patient, considering interaction of psychosocial factor and physical health, i.e. disease.</p> <p>To acquire knowledge of psychology that improves efficiency of preventive, diagnostic, therapeutical and rehabilitating activities.</p> <p>To improve patient-healthcare worker relationship.</p>
Course content:	<p>Psychology in public health. Factors of public health behaving. Stress and physical health. Physical defect, diseases and psychic conditions. Psychic difficulties in hospitalization. Pain. Psychic effects of incurable diseases. Health psychology and profession.</p>
Exam:	Written and oral
ECTS:	3
Reading list:	Havelka, M.: Zdravstvena psihologija. Naklada Slap. Jastrebarsko, 1998

3. 2. 18. HEALTHCARE IN COMMUNITY

Third year, semesters VI, Lectures - 60; Practicum - 60, Total: 120

Course aims:	<p>After the completion of the course student will acquire skills and knowledge of : Assessing the needs for nursing care and healthcare in patient's home, in social institutions, as well as in other health and non health institutions which care about people in community; Recognizing the problem, assessing risks, to set priorities in planning of healthcare; Implementing healthcare in community; Promoting health, implementing health education of population; Nurse role in multidisciplinary approach to solving problems and maintaining of individual's and family health in community.</p>
Course content:	<p>The course content is aimed at complete approach to taking care of healthcare users, family, and at communitiy, preventive actions, applying systematic, logical problem solving in proces of nursing. The content is aimed at tasks that refer to: promoting and preserving health, and preventing diseases in newborn babies, infants, babies, preschool children, school children, youth, pregnant women, and women after giving birth, old and incapacitated people, peoole with bigger needs due to mental of physical disorder, risk behaviour and bad life habits; recognizing and timely discovering of healthcare for sick and incapable people, that is applied at working place and at home; education of users and their families for using various types of aids; education of users and their families for self providing; Informing the user and his/her family about various help services in community and possibilities of using help in order to improve</p>

	health–social status; Healthcare of paralysed and less mobile patients in temporary and permanent condition, where no self providing is possible. Healthcare of paralysed and hardly mobile patient (toilet, help with feeding and dressing, preventing possible complications due to long lying, applying enteral, parenteral and local therapy, taking diagnostic material from immobile patients, healthcare of skin disorders (crural ulcer, decubitus ulcer...); Healthcare of patient with artificial opening (cannula, urocystostomy, etc.)
Exam:	Written and oral
ECTS:	8
Reading list:	<p>Required readings:</p> <p>Mojsović Z i sur: Zdravstvena njega u patronaži, Visoka zdravstvena škola, Zagreb, 1998</p> <p>Zdravstvena njega u zajednici - nastavni tekstovi, Zagreb, 2002</p> <p>Recommended readings:</p> <p>Mardešić, D i sur. Pedijatrija</p> <p>Vrhovac, B. Interna medicina. Zagreb: Naklada Naprijed, 1997.</p>

3. 2. 19. HEALTHCARE OF ADULTS I

Second year, Semesters III, Lectures – 75, Practicum – 90, Total: 165

32.1. HEALTHCARE OF ICLINICAL MEDICINE PATIENTS Lectures 45, practicum 50, total: 95

32.2. HEALTHCARE OF INFECTOLOGICAL PATIENTS Lectures 10, practicum 20, total: 30

32.3. HEALTHCARE OF NEUROLOGICAL PATIENTS Lectures: 20, practicum: 20, total: 40

Course aims:	<p>After mastering the course content student will be able: to recognise pathophysiological changes of clinical medicine, infectological and neurological patients; to assess needs, to plan and to participate in applying healthcare and process of diagnosis, treatment and rehabilitation as a member of a team; to evaluate effects of applied nursing interventions independently; to permanently educate his/herself.</p> <p>Student will be able to independently practise skills included in this course.</p>
Course content:	<p>The course includes theoretical and practical implementation of knowledge aimed at healthcare of patients suffering from clinical medicine, infectological and neurological diseases, with special emphasis on holistic, systematic and individual approach during hospitalisation and after discharging.</p> <p>Depending on chronicity of disease, and period of rehabilitation and palliation of symptoms, disease reflects on patient's life, his/her family, and community. Because of that reason the course includes knowledge of healthcare in community and palliative care, with emphasis on education of patient and his/her family.</p>

Exam:	Written and oral
ECTS:	11
Reading list:	<p>Required readings:</p> <p>Ozimec, Š. Zdravstvena njega infektoloških bolesnika (nastavni tekstovi), Zagreb: Visoka zdravstvena škola, 2000.</p> <p>Ozimec, Š. Zdravstvena njega internističkih bolesnika (nastavni tekstovi), Zagreb: Visoka zdravstvena škola, 2000.</p> <p>Sedić, B. Zdravstvena njega neuroloških bolesnika (nastavni tekstovi), Zagreb: Visoka zdravstvena škola, 2000.</p> <p>Recommended readings:</p> <p>Vrhovac, B. Interna medicina. Zagreb: Naklada Naprijed, 1997.</p> <p>Kuzman, I., Schonwald, S. Infektologija. Zagreb: medicinska naklada, 2000.</p> <p>Poeck, K. Neurologija. Zagreb: Školska knjiga, 1994.</p> <p>Luckman, J. Manual of nursing care. Philadelphia: Saunders, 1997.</p> <p>Brunner, LS., Suddarth, DS. Textbook of medical surgical nursing. Philadelphia: Lippincott Company, 1994.</p> <p>Hickey, JV. Neurological and Neurosurgical nursing. Philadelphia: Lippincott Company, 1998.</p>

3. 2. 20. HEALTHCARE OF ADULTS II

Third year, Semesters V, Lectures – 45; Practicum – 60 ; Total: 105

Course aims:	After completion of the course student will be able: to plan, implement, monitor and assess successfulness of preoperative, perioperative and postoperative healthcare; to plan, implement, monitor and assess successfulness of special healthcares; to perform skills included in the course program
Course content:	<p>The emphasis is put on holistic approach to patient, and systematic preoperative, perioperative and postoperative healthcare.</p> <p>The content is aimed at patient's life quality after surgical procedure, participating in care of his/her family, rehabilitation and possible palliative care (learning more from the areas of healthcare in community, i.e. early detection of patient's needs and problems. The significant part refers to education of patient and members of his/her family).</p>
Exam:	Written and oral
ECTS:	7
Reading list:	<p>Required reading:</p> <p>Kalauz, S. Zdravstvena njega kirurških bolesnika (nastavni tekstovi), Visoka zdravstvena škola, Zagreb, 2000.</p>

Recommended readings:

Bradić I. i sur. Kirurgija, Medicinska knjiga, Zagreb, 1995.

Keros, P., M. Pećina, M. Ivančić-Košuta: Temelji anatomije čovjeka. Naprijed 1999.

Guyton AC, Hall JE. Medicinska fiziologija, 10. izdanje. Zagreb: Medicinska naklada 2003.

Gamulin S. i sur. Patofiziologija, Medicinska naklada, Zagreb, 1998.

Ignatavicius D.D, Workman L.M. Medical surgical nursing, W.B. Saunders Company, Philadelphia, 1995.

Morris C. Medical surgical nursing – core principles and practice, W.B. Saunders Company, Philadelphia, 1996.

Cambell E.J. Basic trauma life support, American College of Emergency Physician

3. 2. 21. HEALTHCARE OF CHILD

Second year, Semesters III, Lectures – 45, Practicum – 90, Total: 135

Course aims:	After completion of the course student will demonstrate his/her knowledge and skills, he/she will have positive attitude and know fundamental concept of healthcare of healthy and unhealthy child, as well as of life endangered child. Ability of assessing needs, planning, implementing, evaluating and taking notes in healthcare of healthy, sick, and life endangered child is also included, The student understands the importance of quality hospitalizing of a child, as well as the importance of active communication with a child and its family. Student acquires knowledge of intervention in diagnostic and treatment program in the correct way for a child, its parents and their security. Student knows to estimate condition of a child and its parents from the view of physical, psychic, social and spiritual needs during hospitalization in ward or in intensive care unit. Student emotionally faces healthcare of life endangered and dying child.
Course content:	The course includes practical experience, promotes issues that contribute to healthy start of life, normal growth and development of a child. It is aimed at factors which vitally endanger child's health, as well as at healthcare of ill and life endangered child. It also includes content which refers to improving quality of hospitalization and communication with a child and its parents in the ward and in intensive care unit; the child's reactions to disease, hospitalization, and child's perception of those reactions; relieving pain; relation and role of a nurse in healthcare of a child with various health needs; appropriate nourishment of healthy, ill and life endangered child; preparing a child for diagnostic-therapeutic procedures.
Exam:	Written, oral and practical
ECTS:	9
Reading list:	Required reading: Turuk V. Zdravstvena njega djeteta (nastavni tekstovi), Visoka zdravstvena škola, 2004.

Recommended readings:

Mardešić, D. i sur. Pedijatrija, Školska knjiga, Zagreb, 2000. – odabrana područja

Švel, I. i Grgurić, J. Zdravstvena zaštita djece, Školska knjiga, Zagreb, 1996. – odabrana područja

Švel, I. i Grgurić, J. Zdravstvena zaštita kronično bolesnoga djeteta, Barbat, Zagreb, 1998 - odabrana područja

Audy – Kolarić, Lj i sur. Anestezija i intenzivno liječenje novorođenčadi, Školska knjiga, Zagreb, 1994 – odabrana područja

Audy – Kolarić, Lj i sur. Hitna stanja u pedijatriji, Školska knjiga, Zagreb, 2001 – odabrana područja

Zergollern, Lj., i suradnici: Pedijatrija 1,2. Naprijed, Zagreb, 1994

Čturić, N., Prve tri godine života, školska knjiga, Zagreb, 1991

Maleš, D., Starčević, I., Druženje djece i odraslih, Grafički zavod Hrvatske, Zagreb, 1991

Bastašić, Z. Lutka ima i srce i pamet, Školska knjiga, Zagreb, 1990

Broadwel – Jackson, D., Saunders .B. R, Child Health nursing , a comprehensive approach to the care of children and their families. J. B. Lippincott comp, Philadelphia 1993,

Recommended magazines:

Pediatric nursing

3. 2. 22. HEALTHCARE OF GERIATRIC PATIENTS

Third year, Semesters V, Lectures: 30, Practicum: 45, Total: 75

Course aims:	<p>Mastering the course student will be able: to recognize pathophysiological changes in geriatric patients; to assess needs, to plan and to participate in implementing healthcare and in process of diagnosis, treatment and rehabilitation as a member of a team; to independently evaluate effects of applied nursing interventions; to permanently educate him/herself.</p> <p>Students will be able to practise skills included into course.</p>
Course content:	<p>The course includes theoretical and practical implementation of knowledge aimed at healthcare of geriatric patients, with emphasis on holistic, systematic and individual approach during hospitalization and after discharging. Depending on chronicity of disease, and period of rehabilitation and palliation of symptoms, disease reflects on patient's life, his/her family, and community. Because of that reason the course includes knowledge of healthcare in community and palliative care, with emphasis on education of patient and his/her family.</p>
Exam:	Written and oral
ECTS:	5
Reading list:	<p>Required reading:</p> <p>Sedić, B. Zdravstvena njega gerijatrijskih bolesnika (nastavni tekstovi),</p>

Zagreb: Visoka zdravstvena škola, 2003.

Recommended reading:

Luckman, J. Manual of nursing care. Philadelphia: Saunders, 1997.

Cassel CK, Reisenberg DE, Sorensen LB, Walsh JR: Geriatric Medicine. New York: Springer-Verlag, 1990.

Duraković Z, i sur. Medicina starije dobi. Zagreb: Naprijed, 1990

3. 2. 23. HEALTHCARE OF MOTHER AND NEWBORN BABY

Second year, semesters III, Lectures – 30, Practicum – 90, Total: 120

Course aims:	After completion of the course student will know the basic principles of healthcare of mother and newborn baby. The student will show knowledge, understanding and positive attitude in healthcare of pregnant woman in antenatal, intrapartum and postpartum period, as well as in healthcare of newborn baby. Student will: recognize pregnancy and puerperium complications; acquire knowledge of balanced nourishment during pregnancy, diagnostic therapeutic program in pregnancy, delivery and puerperium (preparation for tests and course of examination, applying therapy and delivery operations); assess condition of a newborn baby and recognize deviation; learn basic obstetric terminology.
Course content:	The course includes practical experience with the emphasis on physiological pregnancy, delivery and postnatal period as healthy conditions. The course is aimed at assessing risk factors which cause pathologic changes in antenatal, intrapartum, and postpartum period; assessing emergencies in obstetrics; healthcare during and after operative terminated delivery. It describes healthcare of newborn baby with emphasis on parenthood; assessing physical systems of newborn baby, its primitive reflexes, and parental education. The course is aimed at providing healthcare for prematurely born baby and its transport.
Exam:	Written and oral
ECTS:	8
Reading list:	Turuk, V., Zdravstvena njega majke i novorođenčeta, nastavni tekstovi, 2004 Recommended readings: Keros, P., Anatomija i fiziologija, Visoka zdravstvena škola, Zagreb, 2000 Gayton, AC., Medicinska fiziologija, Medicinska knjiga, Zagreb, 1990 Cunningam FG, MacDonald PC, Gant NF, et al. Williams obstetrics. 12 th ed. Stamford: Prentice Hall International, 1997 Djelmiš, j., i sur. Hitna stanja u ginekologiji i porodništvu, Školska knjiga, Zagreb 2003 Dražančić, A., i sur. Porodništvo, Školska knjiga, Zagreb, 1999 Mardešić, D., i sur. Pedijatrija, Školska knjiga, Zagreb, 2000 – odabrana

	područja iz novorođenog i nedonošenog djeteta
	Dickason, Elizabeth J, Olsen M. Maternal – infant nursing care, The C. V. Mosby Company, 1990
	Recommended magazines:
	Midwifery
	The American journal of maternal/child nursing (MCN)

3. 2. 24. HEALTHCARE OF PEOPLE WITH SPECIAL NEEDS

Third year, Semester VI, Lectures - 20; Seminars –10; Practicum -15, Total: 45

Course aims:	After mastering the course content student will be able to demonstrate: knowledge, understanding, attitudes which refer to promoting health and help for people and their families facing development disorders; skills needed for collecting data, planning and implementing healthcare and evaluating the outcome; fundamental theoretical knowledge and understanding of techniques and specific interventions aimed at solving health problems; capability of functioning as a competent member of multidisciplinary team.
Course content:	The course content, including practical knowledge acquired at practicum, is aimed at recognizing specific problems and conditions of people with special needs. The course content includes help in meeting basic human needs, recognizing the symptoms, help in treatment, taking care of problems specific for particular disorder, developing skills for training of self taking care of people with special needs, training social skills, various techniques of help in modification of behaviour, and integration of people into community.
Exam:	Written and oral
ECTS	3
Reading list:	Required reading: Sedić B. Zdravstvena njega osoba s posebnim potrebama, Visoka zdravstvena škola, Zagreb, 2005.

3. 2. 25. HEALTHCARE OF PSYCHIATRIC PATIENTS

Third year, Semesters VI, Lectures - 45; Practicum 60; total 105

Course aims:	After mastering the course content student will be able to present: knowledge, understanding and attitudes referring to promoting mental health, and help for people and their families facing psychic disorders; skills needed for collecting data, planning and implementing healthcare
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	and evaluating outcome; fundamental theoretical knowledge and understandings of negotiating techniques, group therapy and specific interventions in crisis; capability of functioning as a competent member of multidisciplinary team.
Course content:	The course content, including the practical knowledge acquired at practicum, is aimed at mental health and diseases. It builds upon the knowledge acquired from psychological group of courses. Improving mental health and assessment of mental status are the basis of learning about mental diseases, specific technique, and continuous healthcare and rehabilitation. The course content also includes introduction to negotiating techniques, crisis interventions and healthcare of patient on forensic wards
Exam:	Written and oral
ECTS	6
Reading list:	<p>Required reading:</p> <p>Sedić B. Zdravstvena njega psihijatrijskih bolesnika, Visoka zdravstvena škola, Zagreb, 2004.</p> <p>Recommended readings:</p> <p>Jakovljević M (ur). Psihijatrija za studente Više medicinske škole. A. G. Matoš, Samobor, 1995.</p> <p>Foy W. D: Liječenje posttraumatskog stresnog poremećaja. Naklada Slap, Jastrebarsko, 1994.</p> <p>Hotujac Lj. Zloupotreba sredstava ovisnosti. Školska knjiga, Zagreb, 1992.</p> <p>Jakovljević M. Depresija. ProMente, Zagreb, 1998</p> <p>McFarland K. G., Durand Tomas M. Psychiatric and Mental Helth Nursing. J. B. Lippincott com., Philadelphia, 1990.</p> <p>Monat Teylor C. Essentials of Psychiatric Nursing. Mosby, ST. Louis, 1991.</p> <p>Yalom D. I. The Theory and Practice of Group Psychotherapy. Basic Books, Inc., New York, 1992.</p> <p>Sakoman S. Reći ne nije dovoljno. SysPrint, Zagreb, 1995.</p> <p>Žarković Palijan T., Kovačević D. Iz forenzičke psihijatrije. Ceres, Zagreb, 2001.</p>

3. 2. 26. HEALTHCARE PROCESS

First year, Semesters II, Lectures – 45; Seminars 30; Practicum: 30; Total 105

Course aims:	<p>To introduce the student to healthcare process as a method of work. To enable the student to: implement healthcare process, to provide documentation of healthcare, applying skills of nursing practice for healthcare process implementing.</p> <p>After completion of the course student will be competent: to describe and explain healthcare theories using healthcare process; to describe, explain and implement healthcare process; to estimate healthcare needs; to plan healthcare; to make diagnosis in healthcare process; to organize, coordinate and implement planned healthcare using nursing practice skills according to standard (algorithm); to evaluate healthcare; to make documents about healthcare</p>
Course content:	<p>Process of nursing care; Assessing healthcare needs: assessment according to basic human needs of V. Henderson and patterns of health functioning of M. Gordon; planning (defining goals and interventions); implementing healthcare; continuous monitoring; evaluation, discharge summary. Nurse's notes. The most common problems nurse solves – diagnosis in healthcare process ICNP. Skills of nursing practice.</p>
Exam:	Written, oral and practical
ECTS	7
Reading list:	<p>Required readings:</p> <p>Fučkar, G. Proces zdravstvene njege. Medicinski fakultet Sveučilišta u Zagrebu. Zagreb, 1992. (selected chapters).</p> <p>Fučkar, G. Sestrinske dijagnoze. HUSE, Zagreb</p> <p>Henderson, V. Osnovna načela zdravstvene njege. HUSE i HUMS, Zagreb 1994.</p> <p>ICNP</p> <p>Recommended readings:</p> <p>Gordon, M.: Nursing diagnosis, process and application. McGraw-Hill Book Company, New York 1987.</p> <p>Carpenito, L.J.: Handbook of nursing diagnosis. 4. izd. J.B. Lippincot Company Philadelphia, New York 1991.</p>

3. 2. 27. INFORMATION TECHNOLOGY AND ADMINISTRATION IN HEALTH CARE

First year, Semester II, Lectures – 30, Practicum 15; Total - 45

Course aims:	After completion of the course the student will be able to use the computer in everyday work, which includes work in text editing, charts, data base, e-
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	<p>mail and the Internet.</p> <p>After completion of the course the student will have the basic knowledge of administration in nursing, methods of applying administrative procedures, the importance of communicative processes, kinds of hospital and out-hospital administration, hospital and hospital units' structure.</p>
Course content:	<p>Emphasis is put on using the computer independently and unsupervised.</p> <p>Personal computer and Windows operating system, MS Office: Explorer, Word, Excel, PowerPoint, Internet – web browsers, e-mail.</p> <p>The nature and kind of nursing administration, managing administrative procedures, communicative processes in administration, administration in hospital, hospital and hospital units' structure</p>
Exam:	<p>Colloquium – solving the task on computer</p> <p>No grades planned.</p> <p>Colloquium in computer literacy is done after the first month of the course. If the student does well, he/she will get the signature and does not have to attend practicum.</p>
ECTS:	4
Reading list:	<p>MS Explorer on line help</p> <p>MS Word on line help</p> <p>MS Excel on line help</p> <p>MS PowerPoint on line help</p> <p>MS Internet Explorer on line help</p> <p>MS Outlook on line help</p> <p>Other available books on WINDOWS operating system and MS Office</p>

3. 2. 28. METHODS OF HEALTH EDUCATION AND HEALTH PROMOTION

Second year, Semester IV, Lectures 30; Seminars 15, Practicum 15; Total 60

Course aims:	<p>Student should acquire knowledge and skills of recognizing individual and group needs for health education, as well as to implement programs. Program will help nurses to choose the way of necessary help for individual and group in using their own resources for their health.</p> <p>Development of positive attitudes toward health and health culture.</p> <p>To enable a student to implement activities aimed at promoting health.</p>
Course content: Main areas:	<p>Learning and behaving: learning theories/types of learning, learning strategies and techniques, motivation, memorising disorders, forgetting, concentration, exercises and strategies for improving attention, teaching, behavioural modification, didactic basics of organized forms of health education, individual and group work, work with small group, work with community, group dynamics, various group work strategies.</p> <p>Human relationships and processes of helping: self consciousness, self image, self respect, self confidence, self motivation, self protection, support.</p>

	<p>Advising: goals and outcomes of advising, preconditions of successful advising basic concept of advising conversation.</p> <p>Health behaviour: needs, attitudes, values, believes, culture and customs.</p> <p>Practical part of the course accompanies theoretical themes.</p>
Exam:	Written and oral
ECTS:	3
Reading list:	<p>Barath, A.: Kultura, odgoj i zdravlje, Zagreb, 1995.</p> <p>Zarevski, P.: Psihologija pamćenja i učenja, Zagreb, 1994.</p> <p>Varoščić, M.: Izvori znanja u stjecanju zdravstvene kulture, Rijeka, 1991.</p>

3. 2. 29. MICROBIOLOGY WITH PARASITOLOGY

First year, Semester I, Lectures - 30; Practicum – 15; Total 45

Course aims:	To introduce students to micro organisms which are potential causes of human diseases, with their habitats, ways of transmission, and procedures of preventing their spreading in hospital surrounding.
Course content:	Student will be introduced to fundamental characteristics of the most common causative agents of human infections. Using particular infectious system student will be informed about possible causative agents, the ways of collecting and transporting material for microbiological analysis, and about measures which must be implemented in order to prevent further transmission. The emphasis is put on prevention of transmission of hospital infections from patient to patient, to health worker, as well as from health worker to patient.
Exam:	Written
ECTS:	3
Reading list:	<p>Required readings:</p> <p>Katedra za bakteriologiju, virologiju i parazitologiju: Klinička mikrobiologija i parazitologija. Udžbenik. Medicinski fakultet, Sveučilište u Zagrebu, Zagreb, 1996.</p> <p>Kalenić S, Mlinarić-Missoni E. i sur.: Medicinska bakteriologija i mikologija, selected chapters Prehrambeno tehnološki inženjering, Zagreb, 1995.</p> <p>Recommended readings:</p> <p>Brudnjak Z.: Medicinska virologija, selected chapters, 3-će izdanje, JUMENA, Zagreb, 1989.</p> <p>Richter B.: Medicinska parazitologija, selected chapters, 5-to izdanje, Medicinski fakultet, Sveučilište u Zagrebu, Zagreb, 1991.</p>

3. 2. 30. OPTIONAL COURSES

Second and third year, semesters III, IV, VI – Lectures - 15, Practicum – 15 Total – 30

3. 2. 30. 1. BIOLOGICAL BASIS OF BEHAVIOUR

Course aims:	<p>After completion of the course content student will be able to understand neurobiological basis of behaviour. Student will be able to analyse the role of left and right brain hemisphere and a single lobe in certain functions. Student will be able to describe neurobiological basis of biological rhythms and sleep, emotions and sexuality. The content of the course will enable the student to connect cognitive functions of memory, language, speech, attention and spatial skills with their neural basis.</p> <p>Student will be able to distinguish among disorders of cognitive and other functions which are due to brain damage. Student will be also able to understand the role of plasticity of brain in its normal development and after damage.</p>
Course content:	<p>Functional organisation in brain. Brain lateralisation – the role of right and left brain hemisphere. The role of certain lobes. Neurobiology of sleep and biological rhythms. Neurobiology of emotions and sexuality. Neurobiology of higher cognitive functions: memory, language and speech, attention and spatial skills. The disorders of cognitive and other functions which are due to brain damage. Brain plasticity in its normal development and after damage.</p>
Exam:	Written and oral
ECTS:	2
Reading list:	Pinel, J.P. Biološka psihologija. Jastrebarsko: Naklada Slap, 2002.

3. 2. 30. 2. TOURIST MEDICINE

Course aims:	<p>Introduce students to all kinds of active and passive healthcare of tourist population, hygienic measures, urgent states, infectological diseases and different physical injuries more frequent in tourist population. Students will master skills and competencies for offering help in specific cases related to diseases that are more frequent in tourist population</p>
Course content:	<p>Importance of tourist medicine, hygienic and epidemiological characteristics, urgent states, infectious and dermatological diseases related to tourism, kinetosis, mountain medicine and organization of mountain rescue service, maritime medicine</p>
Exam:	Written and oral
ECTS:	2
Reading list:	<p>Required reading: Capar M. i sur. Priručnik turističke medicine. Pula: Znanstvena jedinica-</p>

3. 2. 30. 3. DEVELOPMENTAL PSYCHOLOGY

Course aims	Acquisition of insight into the developmental dimension of human life and specificity of each developmental period, acquisition of knowledge on the impact of different factors on development in the context of the specific development phases.
Course content	Introduction into the psychological development of man; development, health and illness; methods of studying psychological development; developmental theories; characteristics of different developmental periods- genetic bases of development; prenatal development; prenatal surroundings; development in the first year of life – newborn child’s adapting, growth and development; development of motorics and perception; cognitive development, development of personality and social development; early childhood development- physical and motorical, cognitive, social and personality development; development in adolescence- relation between physical and psychological development, development of sexual characteristics, motorical, cognitive and social development, development of personality; problems of adolescence; development in younger adult age- physical, cognitive and social development, family, occupation and professional development; development in middle adult age- physical, cognitive and social development, middle life crisis, family and professional changes; development in old age- aging, old age of people and individuals, theories of aging, changes in capabilities, personality and aging, social relations, family, mental health, death and dying, models of social and health care for old people.
Exam:	Written and oral
ECTS:	2
Reading list:	<p>Required readings:</p> <p>Santrock, J.W. (2003). Life-Span Development, New York: McGraw Hill.</p> <p>Vasta, R. i sur.(2000). Dječja psihologija, Naklada slap, Jastrebarsko Dopunska</p> <p>Lacković-Grgin, K. (2006). Psihologija životnog vijeka: kratki osvrt na njezinu povijest i probleme, U: K.Lacković-Grgin, V.Čubela, Odabrane teme iz psihologije odraslih, Naklada Slap.</p> <p>Klarin, M. (2006). Razvoj djece u socijalnom kontekstu, Naklada Slap, Jastrebarsko.</p> <p>Thomas, R.M. (2001). Recent theories of human development, London, Sage Publications, Inc.</p> <p>Andrilović, A., Čudina, M. Osnove opće i razvojne psihologije, Školska knjiga, Zagreb</p> <p>Furlan, I. Čovjekov psihički razvoj, Školska knjiga, Zagreb</p>

3. 2. 30. 4. HEALTHCARE OF ONCOLOGICAL PATIENTS

Course aims:	<p>After completion of the course the student will show the knowledge and understanding of problems of oncological patients' conditions.</p> <p>As a member of healthcare team student will participate in planning, implementing and evaluating health care, as well as in procedures of diagnosis and treatment.</p> <p>Student will be trained to perform necessary skills of nursing practice taking care of patient suffering from malignant disease.</p>
Course content:	<p>In the course the emphasis is put on individual and holistic approach to a patient suffering from malignant disease, as well as to members of patient's family. Healthcare of such patients is described, with the emphasis on the most often nursing diagnosis and complications which occur as side effects of the treatment. The course is also aimed at an early detection of malignant disease, at promoting healthy lifestyle which reduces the risk of malignant diseases.</p> <p>Students learn about the procedures of self protection while administering therapeutical methods in treatment of malignant diseases.</p>
Exam:	Written and oral
ECTS:	2
Reading list:	<p>Required readings:</p> <p>Yasko, J.M. Medicinska njega bolesnika sa simptomima vezanim uz kemoterapiju. Reston: Sveučilište u Pittsburghu, 1983.</p> <p>Čukljek, S. Zdravstvena njega onkoloških bolesnika- Nastavni tekstovi, VZŠ, 2002.</p> <p>Recommendend readings:</p> <p>Vrhovac, B. i sur. Interna medicina. Zagreb: Naprijed, 1997. (selected chapters)</p> <p>Šamija, M. Onkologija. Medicinska naklada, Zagreb, 2000.</p>

3. 2. 30. 5. PSYCHOLOGY OF PAIN

Course aims:	<p>To understand the variety of painful experience; to be able to distinguish among certain kind of pain; to recognize the behavioural pattern in pain; to learn the influence of psychological and sociocultural factors on pain; to learn the procedures to measure the pain; to learn the psychological procedures for pain relief.</p>
Course content:	<p>Types of pain; causes and reactions to pain; pain theories; behaving in pain; psychological directives of pain; sociocultural directives of pain; pain relief.</p>

Exam:	Written and oral
ECTS:	2
Reading list:	Havelka, M. i Despot Lučanin, J. Psihologija boli. Zagreb: Medicinski fakultet, 1991. Havelka, M., Lučanin, D. i Ivanec, D. O boli. U: M. Havelka (ur.) Zdravstvena psihologija, 159-208. Jastrebarsko: Naklada Slap, 1998.

3. 2. 30. 6. WORK WITH A GROUP IN NURSING

Course content:	Mastering the course content student will be able to analyse group communication, to understand the factors which influence group dynamics, to distinguish the types of groups, to recognize the stage of group development. To apply group work in clinical surroundings. To compare the work of various patients' groups in nursing.
Course content:	Group: basic concept, definitions, divisions. Group dynamics and group processes: goals, norms, cohesiveness, roles. Managing of a group: types of managers, skills of a manager, decision making, and evaluating group work. types of groups in nursing: therapeutic, institutional – orientative, resocializing, motivating, remembering, therapeutic activities, self-helping, educational, discussional, communicative. Peculiarity of work with a group of people with different health problems.
Exam:	Written and oral
ECTS:	2
Reading list:	Havelka, M.(ur.) Zdravstvena psihologija. Jastrebarsko: Naklada Slap, 1998. Ajduković M. Grupni pristup u psihosocijalnom radu. Zagreb: Društvo za psihološku pomoć. 1997.

3. 2. 31. PATHOLOGY

First year, Semester II, Lectures –15, Total 15

Course aims:	After completion of the course student will acquire knowledge, understanding and attitude toward the importance of pathology in clinical logarithm of diagnosis of patient in hospital. Student will acquire knowledge of importance of correct specimens' collection for pathohistological analysis. Also, student will be able to recognize negative influence of inadequate fixation and tissue analysis in making correct diagnosis that influences the course of patient's treatment. Student will be able to recognize diagnosis according to organ systems.
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Course content:	<p>The course includes acquiring knowledge from the area of organ system pathology. Enables recognition of histological changes of most common entities in organ systems, as well as recognition of value of pathohistologic reports in clinical practice in creating therapeutic approach connected to expression of particular prognostic factors. The course content builds upon knowledge of disease and conditions' pathophysiology in clinical practice.</p> <p>General pathology will analyse: death types and signs (recognition of natural and violent death), cell structure and its adjustment, hemodynamic disorder, neoplasma, assessing disease stage, preparing materials for pathohistologic analysis (fixation, dehydration, putting into paraffin, cutting, colouring, histologic analysis), principles of hypersensitive reactions, fundamental characteristics of benign and malignant tumours, metastasize and biology of tumour invasion.</p> <p>Special pathology: Clinical and pathologic characteristics of most common chromosomopathy, characteristics of autosome dominant, autosome recessive and x-connected recessive way of heredity. Thrombosis, oedema, embolism, infarction and shock, atherosclerosis, aneurysm, the most common congenital and gained heart diseases, obstructive and restrictive pulmonary diseases, pulmonary infections, tumour of lung and pleura, motoric disorders, varicosity, oesophagus tumours, gastritis, peptic ulcer, benign and malignant stomach tumours, vascular and inflammation intestine disorders, benign and malignant intestine tumours, hepatitis, cirrhosis, inflammations and tumours of gallbladder and pancreas, glomerulonephritises, interstitial diseases of kidneys, tumours of kidneys and urinary system inflammations and tumours of male and female reproductive system, anaemia, inflammation of lymph node, Hodgkin and non-Hodgkin lymphoma, symptoms and morphological basis of endocrinological system, most common benign and malignant skin tumours, congenital anomalies, fracture, inflammations and tumours of bones, circulatory disorders, brain tumours and trauma.</p>
Exam:	Written and oral
ECTS:	2
Reading list:	<p>Required readings:</p> <p>Jukić, S. Patologija za više medicinske sestre, Medicinska naklada, Zagreb, 1992.</p> <p>Jakić-Razumović, J. Patologija-priručnik, Visoka zdravstvena škola, 2002.</p> <p>Recommended reading:</p> <p>Cotran, RS., Kumar, V., Collins, T., Robbins Pathologic Basis of Disease. 6th ed. Saunders Company, Philadelphia, 1999.</p>

3. 2. 32. PATHOPHYSIOLOGY

First year, Semester I, Lectures – 30; Total 30

Course aims:	<p>To introduce the student to fundamental mechanisms of disorders of physiological processes in human body, and of development of diseases. Acquired knowledge will be useful for mastering subjects in clinical</p>
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	medicine and planning of nursing care at various diseases.
Course content:	<p>Course includes acquiring knowledge of general pathophysiology and knowledge from area of functional disorder of certain organ systems.</p> <p>Health and disease, disorders of homeostatic mechanisms.</p> <p>Disorders of haematopoietic system and infections, disorders of heart function, disorders of hemodynamic, respiratory disorders, balance disorders, body fluids and kidney function disorder, digestive system functional disorder, metabolic disorder, endocrine glands disorder, tumour immunology and immunodeficiency, functional disorder of nervous system.</p>
Exam:	Written and oral
ECTS	3
Reading list:	<p>Required reading:</p> <p>Gamulin, Marušić i sur.: Patofiziologija, peto obnovljeno i obnovljeno izdanje, Medicinska naknada Zagreb, 2002. (selected chapters)</p>

3. 2. 33. PHARMACOLOGY

Second year, Semester 3, Lectures – 30; Practicum – 15; Total 45

Course aims:	<p>After completion of the course the student will know the basics of pharmacology, the importance of recognizing unwanted and harmful effects of medicine, as well as fast and appropriate intervention in the case of anaphylaxis.</p> <p>Through the set of lectures the student will acquire the knowledge of fundamental pharmacologic concepts, the mechanisms of effects of medicine, and of the factors of pharmacological answer. Student will be able to recognize the characteristics of administering medicine for certain organic disorder, to differ between unwanted and harmful effects of medicine, to recognize the symptoms of anaphylactic reaction, to understand pharmacokinetics and pharmacodynamics of medicine which the students will most often use in their practice (analgesic, antimicrobial medicine, antihistaminic, local anaesthetics, etc.)</p>
Course content:	Fundamental course units: General pharmacology; Research and clinical study of medicine; Antimicrobial medicine; Allergic reactions; Toxicity of medicine; Analgesic and pain pharmacology; Using medicine in certain organic disorders (cardiovascular, digestive system, central and peripheral nervous system and kidney); Rational pharmacotherapy
Exam:	Written and oral
ECTS:	3
Reading list:	<p>Required readings:</p> <p>Farmakoterapijski priručnik, 3. izdanje, Vrhovac B. i Reiner Ž. (ur), Med-Ekon, Zagreb, 2000.</p>

Interna medicina, 2. izdanje, Vrhovac B. i sur, Naprijed, Zagreb, 1997.

Recommended readings:

Medicinska farmakologija, grupa autora, Medicinska naklada, Zagreb, 1993.

Grupa autora. Medicinska farmakologija. Zagreb, Medicinska naklada, 1983.

Bulat, M., Geber, J., Lacković, Z. Medicinska farmakologija. Zagreb, Medicinska naklada, 1999.

3. 2. 34. PHILOSOPHY AND BIOETHICS IN HEALTHCARE

First year, Semester II, Lectures – 30; Seminars 15; Total 45

Course aims:	<p>Introduction to philosophy and ethics as a branch of philosophy, beginnings of medical and deontological ethics, historical review of ethical studies, professional ethics of nurses, Declaration on human rights, patient's rights, ethical dilemmas in modern medicine and health care.</p> <p>After completion of the course the student will be able: to describe ethics as a branch of philosophy; to describe and explain the beginnings of medical and deontological ethics; to describe and explain division of ethical studies (ethics of virtue, Kant's deontological ethics, Christian virtue ethics, deontological ethics, ethics of care); to describe, explain and apply professional ethics and nursing (code of ethics); to describe, explain and apply principles of ethics in nursing – nurses' code of ethics; to describe, explain and take positive attitude in various ethical dilemmas in nursing practice; to describe, explain and apply the Declaration on human rights, patient's rights; to explain the significance of and respect professional confidentiality; to promote and respect human rights, children's rights and patient's rights</p>
Course content:	<p>Ethics, morality, bioethics, deontology,. Beginnings of medical ethics and deontology (Hippocratic oath, Moses Maimonides, Amatus Lustianus, Thomas Perrcival).</p> <p>Declaration, resolution at ethical level compulsory for all national physicians' associations. Historical review of ethical studies. Division of ethical studies (ethics of virtue, Kant's deontological ethics, Christian virtue ethics, deontological ethics, ethics of care). Moral values – moral characteristics of an individual (self-control, attitude toward a patient, his/her family, co workers). Professional ethics and nursing (code of ethics – ICN, Croatian Nurses Association, Nurses Bar in the Republic of Croatia). Ethics in nursing interactions, ethical dilemmas of modern medicine – healthcare. Respect for human life from conception to death. Euthanasia. Nurse as Life advocate.</p>
Exam:	Written and oral
ECTS:	3
Reading list:	<p>Required readings</p> <p>Švajger, A. ur.: Medicinska etika, priručno štivo. II. izdanje, Sveučilište u Zagrebu</p>

Medicinski fakultet, Zagreb, 1995.

Znidarčić, Ž. Medicinska etika I. Centar za bioetiku FTIDI Zagreb, Zagreb 2004.

Prlić, N.: Etika zdravstvenih djelatnika u Zdravstvena njega, VII. izd. Školska knjiga, Zagreb 2003.

Etički kodeks: HUMS, Zagreb 1994.

Recommended readings:

Matulić, : Bioetika

Pozaić, V.: Čuvari života – radosti i tjeskobe djelatnika u zdravstvu, Centar za bioetiku FTIDI Zagreb, Zagreb 1998.

Pozaić, V.: Život prije rođenja, Centar za bioetiku FTIDI Zagreb, Zagreb 1990.

Volarić – Mršić, A.: Kultura života, Centar za bioetiku Hrvatska, FTIDI, Zagreb 2002.

Kubler – Ross, E.: Razgovori s umirućima, «Oko tri ujutro», Zagreb, 1980.

Babić, S., Santrič, V.: Pravednost i pravo na zdravlje i zdravstvenu zaštitu. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb, 1992.

Orešković, S., Babić, S. Pravo na život, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb, 1991.

Mandić, N.: Etika i psihijatrija (247 – 253) u Muičević i sur. Psihijatrija, Medicinska naklada, Zagreb, 1995.

Baccarini, E.: Kantovo nasljeđe i pitanje eutanazije, Filozofska istraživanja 85-86. Zagreb 2002.517:30.

Barišić, P. Etika kreposti u suvremenom društvu. Filozofska istraživanja 85-86. Zagreb 2002.507:15.

Sestrinski glasnici... HUMS

Glasnici Hrvatskoga katoličkoga liječničkog društva...

Recommended reading in foreign language

Mohar, P.: Temelji medicinske etike in deontologije, Zavod Republike Slovenije za šolstvo i šport, Ljubljana, 1994.

Tschudin, V. Ethik in der Krankenpflege, RECOM, Basel 1988.

3. 2. 35. PUBLIC HEALTH

Third year, Semester VI, Lectures - 45 Practicum – 15 Total - 60

Course aims:	After completion of the course a student will know the system of health protection and the role of public health in society. The course will enable student to understand the social influences on health, and to understand the principles on which the system of healthcare is based. The emphasis is on promoting health, and recognizing risk factors of emerging of modern public health problems.
Course content:	To define public health and system of health protection, the factors that influence health, “health for everyone”, the improvement of health, public health needs and requests, health state of the population, population

	dynamics and demographic features. Health of an individual and community, health risk factors, public health economy. Methods of public intervention in the field of social security, unemployment and health; social needs and protection, co protection and self protection. Acquiring knowledge and skills to assess the condition of public health, intervention at chronic diseases. Planning and evaluating public health protection, standards and norms, assessing work quality and professional supervision, medical records.
Exam:	Oral, with an insight in the record from practical work and papers
Lecturers:	4
Reading list:	Jakšić Ž, Kovačić L. i sur. Socijalna medicina, Zagreb, Medicinska naklada 2000. Jonjić A. i sur. Socijalna medicina. Vitagraf Rijeka, 2002. Kesić B. Život i zdravlje, Zagreb, 1993.

3. 2. 36. SOCIAL AND PUBLIC HEALTH LEGISLATION

Second year, Semester III, Lectures - 30 Total: 30

Course aims:	Students will be introduced to social and public health legislation of the Republic of Croatia, with emphasis on Nursing legislation, its content and way of work.
Course content:	The course contains basics of social and public health legislation with chosen chapters connected to legislation and regulations of nursing practice in the Republic of Croatia. Regulations and legislation of nursing practice in the world; Regulations and legislation of nursing practice in the Republic of Croatia; Law in nursing
Exam:	Written and oralpismeni i usmeni
ECTS:	2
Reading list:	Zakon o sestinstvu. Narodne novine br. 121; 2003. Zakon o zdravstvenoj zaštiti. Narodne novine, 2004.

3. 2. 37. SOCIOLOGY

Second year, Semester III, Lectures - 30, Total: 30

Course aims:	Aim is to enable acquiring insight and knowledge of specific issues, i.e. relations (interactions) and tendencies which appear in nursing – public health –community relation. In that way to contribute to their wider professional and humanistic education.
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Course content:	<p>The course includes content from general medical sociology, its development, areas of interests of medical sociology.</p> <p>Student is introduced to a concept of profession in public health, problems of professionalizing nursing, role of nursing in relation to other professions in public health. Student is introduced to fundamental medical ethics and medical law.</p>
Exam:	Written and oral
ECTS:	2
Reading list:	<p>Letica, S. i sur. Medicinska sociologija – osnovni koncepti: Zagreb: Medicinski fakultet Sveučilišta u Zagrebu, 1985. (selected chapters)</p> <p>Babić, S. Santrić, V. Pravednost i pravo na zdravlje i zdravstvenu zaštitu. Zagreb: Biblioteka udžbenici i priručnici Medicinskog fakulteta Sveučilišta u Zagrebu, 1992. (selected chapters).</p>

3. 3. Structure of study, rhythm of study and student obligations

The professional study of nursing is conducted as a three year, six semester study. Courses in the form of lessons, seminars and exercises can last at least twenty, and at most thirty hours per week. Student work in all kinds of activities is organized in the frame of the 40-hour week, including exercises in teaching bases. Courses are conducted through lectures, seminars, practical work, consultations, mentorship, study trips, continuous assesment of knowledge, preliminary exams, exams, and final work. Practical work is considered as: regular work of students in teaching bases, including exercises, professional practice, field work, and other kinds of lessons that contribute to acquiring of foreseen knowledge, skills and attitudes.

After enrollment into the first year of study, Department of Medical Studies, at the Head's proposal, appoints an advisor to each student. The advisor follows the student's work during his/her study and helps him/her in the acquisition of the program.

The advisor seeks to solve student's problems through advice and directions, and if he doesn't succeed, he asks the Vice-head of the Department, responsible for education issues, for help.

The student can be absent from courses up to 20 % of the total hours of seminars, demonstrations and exercises during one semester. The coordinator of each course has to establish the ways of compensating justified absences from classes. The way of controlling class presence is defined by the coordinator. Exceptionally can a student get a possibility to compensate absence of up to 50% from classes, according to the Study regulations. This regulation applies also to students sportsmen.

Student's knowledge is assessed and graded throughout the academic year, and the final grade is determined at the exam. The status of a full-time student, who is financed through a full state subvention, is held by a student during the prescribed duration of study, and at most during the time one third longer than the prescribed duration, that is until the end of the academic year in which that deadline expires. The student has a right to enroll into the next study year if he/she has fulfilled all the obligations determined by the study program, based on the principle "year after year". The student can enroll again into the same year of study only once, if he/she achieves at least thirty credits in the year he/she repeats. In case the students doesn't fulfill all the obligations, he/she loses the status of the the full-time student.

3. 3. 1. Structure of study according to the study years

The following tables present the list of obligatory courses, according to the year of study and thematic division, and with the student workload, which, besides the lecture hours, indicates the estimated time needed to acquire the knowledge and competencies needed for a certain course.

Table 2. List of courses in the first year

		Semester I			Semester II			Total			Practic e/Learn ing	ECTS
		L	S	P	L	S	P	L	S	P		
	HEALTHCARE											
1.	Philosophy and bioethics in healthcare				30	15		30	15		/30	3
2.	Information technology and administration in healthcare	15		30				15		30	15/45	4
3.	Healthcare basics	45	30	120				45	30	120	30/50	11
4.	Healthcare process				45	30	120	45	30	120	35/40	12
	FOUNDATION SCIENCES											
1.	Anatomy and physiology	45		15				45		15	/80	5
2.	Biophysics, biochemistry and basics of radiology	30						30			/50	3
3.	Dietetics	30	15					30	15		10/30	3
4.	Epidemiology	30		15				30		15	/40	3
5.	Microbiology with parasitology	30		15				30		15	10/30	3
6.	Pathophysiology	30						30			30	3
7.	Pathology	15						15			/30	2
	SOCIAL SCIENCES											
1.	Communicative skills				15		30	15		30	/40	3
2.	Health psychology				30			30			/45	2
3.	Foreign language	15		15	15		15	30		30	30/30	4
	TOTAL	285	45	210	135	45	165	320	90	375	100/ 570	61
		540			345			785				
		Lectures		Practicum		Practicum		Learning		total		
1.	HEALTHCARE	210		270		80		165		725		
2.	FOUNDATION SCIENCES	225		45		20		290		580		
3.	SOCIAL SCIENCES	75		60		30		115		280		
	TOTAL	495		405		130		570		1585		

Table 3. List of courses in the second year

		Semester I			Semester II			Total			Practice/ Learning	ECTS
		L	S	P	L	S	P	L	S	P		
	HEALTHCARE											
1.	Healthcare of child	45		110				45		110	20/50	10
2.	Healthcare of mother and newborn baby	30		110				30		110	15/45	10
3.	Healthcare of adults I	75		170				75		170	15/55	13
	FOUNDATION SCIENCES											
	Pharmacology				30		15	30		15	10/30	3
	Clinical medicine I				60			60			/80	5
	Clinical medicine II	30						30			/50	3
	Clinical propedeutics	30		15				30		15	15/45	3
	Methods of health education and health promotion				30	15	15	30	15	15	10/30	3
	SOCIAL SCIENCES											
1	Social and nursing legislature				30			30			/20	2
2	Foreign language		15			15			30		/30	4
3	Sociology				30		15	30		15	/20	3
	OPTIONAL COURSES											
1.	Optional subject	15		15				15		15	10/20	2
2.	Optional subject				15		15	15		15	10/20	2
	TOTAL	225	15	420	195	30	60	420	45	380	105/ 495	63
		660			285			845				

		Lectures	Practicum	Practicum	Learning	total
1.	HEALTHCARE	150	390	50	150	740
2.	FOUNDATION SCIENCES	195	45	35	235	510
3.	SOCIAL SCIENCES	90	15	-	70	175
4.	OPTIONAL COURSES	30	30	20	40	120
	TOTAL	465	480	105	495	1545

Table 4. List of courses in the third year

		Semester I			Semester II			Total			Practicu m/Learn ing	ECTS
		L	S	P	L	S	P	L	S	P		
	HEALTHCARE											
-	Coordination and supervision of healthcare	45		60				45		60	15/40	6
-	Basics of research work in nursing				30	15	30	30	15	30	15/20	3
-	Healthcare of geriatric patients				30		75	30		75	15/40	6
-	Healthcare of adults II	45		90				45		90	20/45	9
-	Healthcare of people with speial needs				20	10	15	20	10	15	10/20	3
-	Healthcare of psychiatric patients	45		90				45		90	20/45	7
-	Healthcare in community				60		60	60		60	20/60	5
	FOUNDATION SCIENCES											
-	Public health				45		15	45		15	10/40	4
-	Clinical medicine III				65			65			/60	5
-	Clinical medicine IV	45						45			/60	3
-	Clinical medicine V				30		15	30		15	15/60	3
	OPTIONAL COURSES											
-	Optional course				15		15	15		15	10/20	2
	TOTAL	180	0	240	295	25	225	475	25	465	150/510	56
		420			545			965				

		Lectures	Practicum	Practicum	Learning	total
1.	HEALTHCARE	300	420	115	270	1105
2.	FOUNDATION SCIENCES	185	30	25	220	460
3.	SOCIAL SCIENCES	-	-	-	-	-
4.	OPTIONAL COURSES	15	15	10	20	60
	TOTAL	500	465	150	510	1625

Table 5. Total number of lessons

		Lectures	Practicum	Practicum	Learning	total
1.	HEALTHCARE					
	first year	210	270	80	165	725
	second year	150	390	50	150	740
	third year	300	420	115	270	1150
	optional courses	45	45	30	60	180
	Total	705	1125	275	645	2750
2.	FOUNDATION SCIENCES					
	first year	225	45	20	290	580
	second year	195	45	35	235	510
	third year	150	30	25	220	395
	Total	570	100	80	745	1495
3.	SOCIAL SCIENCES					
	first year	75	60	30	115	280
	second year	90	15	-	70	175
	Total	165	75	30	185	455
	TOAL	1440	1300	385	1575	4700

3. 4. List of courses and/or modules which students can choose from other study programs

The University of Zadar recognizes ALL the obligatory courses and modules, as well as ALL the elective courses of the corresponding professional studies of Medical College and the Faculty of Medicine in Rijeka and Split. That means that this professional study program is entirely compatible to the programs of the Medical College and the Faculty of Medicine in Rijeka and Split (which is a result of a mutual agreement), therefore mobility of students, following different courses and taking exams in these institutions are unquestionable and with no limitations.

Mutual recognition of exams and ECTS credits from other institutions will be solved through Cooperation agreements

3. 5. List of courses and/or modules which can be conducted in a foreign language

For the time being there is no possibility of conducting any course or module in a foreign language, but in 2-3 years the possibility of conducting a part or an entire program in English will be taken into consideration (it will depend on the interest or technical possibilities of the University).

3. 6. Criteria and conditions of ECTS credit transfer

As in the point 3.4, students of the professional study of the University of Zadar can move to any of the three institutions in the Republic of Croatia (Medical College in Zagreb, Faculty of Medicine in Split and Rijeka) and vice versa. This means that they can spend THE WHOLE ACADEMIC YEAR and follow and take an exam in ANY OBLIGATORY OR ELECTIVE course in one of these institutions, without any limitations. Thus acquired ECTS credits are fully recognized, because they are EQUAL and AGREED UPON in all four institutions.

Other forms of recognition conditions and criteria of ECTS credit transfer still have to be agreed through mutual agreements.

3. 6. Way of study completion

Student chooses and registers the topic of the final work. After finishing the third year and passing the exams determined by the study program, student can present himself/herself at the defense of the final work in front of the three member commission appointed by the head of the Department of Medical Studies.