

Undergraduate study program in Nursing (Bachelor program)

List of courses that can be delivered in English, including learning outcomes and course coordinators qualified to teach them in English

Fundamentals of Medical Chemistry and Biochemistry (course coordinator: Rosana Ribić)

- Recognize and explain the basic structural characteristics of biologically important molecules: proteins, carbohydrates, lipids and nucleic acids.
- Understand and explain the function of the most important biomolecules: proteins, carbohydrates, lipids and nucleic acids.
- Connect the structure of biologically important molecules with their function.
- Explain the basic principles of digestion and metabolism.

Pharmacology (course coordinators: Rosana Ribić, Sonja Obranić)

- Acquire knowledge about the use of medicines, their fate in the organism, and the desired and undesired effects of medicines, as well as knowledge about medicines encountered in everyday work.
- Introduce the student to the functioning of national and European bodies involved in the field of medicines, as well as legislation in the field of medicinal products.
- Acquire knowledge and skill in finding necessary information on the effectiveness, use, side effects and interactions of medicines encountered in everyday work.

Fundamentals of Nursing Care (course coordinators: Marijana Neuberg, Valentina Vincek)

- After completing the course, the student will be able to list, describe and connect general concepts and definitions in nursing.
- Define, anticipate and apply nursing care in accordance with basic human needs.
- State, explain and apply knowledge and skills related to general infection-prevention procedures.
- Identify, describe and measure vital signs and apply procedures for their regulation.
- State, describe, collect and dispose of bodily excretions.
- State, describe and apply methods for administering all forms of medicines.
- Define, recognize, differentiate and use procedures for maintaining skin integrity.

Sociology of Health (course coordinators: Marijana Neuberg, Irena Canjuga, Marija Bubaš)

- Reproduce basic sociological knowledge needed to understand the importance of social issues in medicine, health care and nursing, and social policies in professional nursing.
- Independently conduct elementary analysis of observed political and social phenomena at the individual level and connect the results of such analyses with the needs of their future profession.
- Compare different health systems and critically analyse them from a sociological perspective; understand the patient as a subject in the treatment process; interpret and apply fundamental knowledge on principles of justice and equality in society.
- Develop awareness of the need for tolerance and the importance of interdisciplinarity in providing nursing care; understand and explain the sociology of nursing and its role within the sociology of health.
- Explain and understand the impact of social subsystems (education, religion, culture, etc.), demographic trends and population migration on the health status of society and individuals; explain gender-related determinants of health.

Organization, Management and Administration in Nursing (course coordinators: Marijana Neuberg, Ivana Herak, Tina Košanski)

- Describe and explain management theories, management processes, concepts of organizational culture, organizational structure, organizational principles and concepts, the structure of a work organization according to leadership concepts, and the specifics of strategic and operational management; demonstrate organizational and managerial skills in nursing practice at different levels of management.
- Explain and apply human-resource management styles and models and different models of work organization in the nursing process; explain and demonstrate methods of task delegation and the supervision process in nursing practice.
- Explain the functioning of technical and structural support systems and their application in nursing practice; explain and demonstrate patient categorization in nursing practice, organization of nurses' work in accordance with patient needs, and calculation of the required number of nurses based on patient needs through direct and indirect nursing care.
- Explain the principles of teamwork: team building and interdisciplinary and multidisciplinary approaches in nursing practice; demonstrate time-management skills and their application in nursing practice; plan and conduct the process of managing changes in nursing practice and explain methods, principles and conditions for decision-making and their application in nursing practice.
- Explain quality-management processes in the field of nursing care: quality-management systems, quality standards in nursing practice, the quality cycle and quality indicators.

- Explain principles of administrative work: nursing documentation, electronic patient record, electronic ward rounds, planning of material and other costs, and methods and principles of coordinating work with non-medical services within a work organization.

Nursing Care of Older Adults (course coordinator: Marijana Neuberg)

- Describe basic concepts in geriatrics and gerontology.
- Explain characteristics of demographic, biological, psychological and social ageing.
- Differentiate physiological from pathological changes in older age.
- Recognize the most common health problems of older adults.
- Participate in diagnostic, therapeutic and rehabilitation procedures as a team member.
- Assess needs, plan, implement and evaluate nursing care of older adults.
- Apply preventive measures for older adults.
- Compare basic models of care for older adults.
- Develop positive attitudes towards older age and older persons.
- Recognize and prevent neglect and abuse of older adults.

Palliative Nursing Care (course coordinators: Marijana Neuberg, Valentina Novak)

- Explain the philosophy and principles of palliative nursing care.
- Describe organizational forms and levels of palliative care.
- Identify main characteristics of palliative care in hospitals, hospices and the community.
- Assess needs, plan, implement and evaluate palliative care.
- Review procedures for alleviating symptoms and suffering.
- Organize professional and social support for the patient and family.
- Assess ethical issues in palliative care.

Sexually Transmitted Diseases in Clinical Practice (course coordinator: Tomislav Meštrović)

- Distinguish and understand microbiological characteristics of sexually transmitted disease agents and epidemiological trends after lectures and practical classes.
- Recognize clinical presentations of individual sexually transmitted infections and optimal diagnostic techniques.
- Recognize and apply principles of antimicrobial therapy and understand significance of STDs in pregnancy.

- Explain importance of protective measures during sampling and plan, implement and evaluate preventive measures.
- Provide professional and social support and consolidate knowledge from microbiology, hygiene, epidemiology and infectious diseases.

Microbiology with Parasitology (course coordinator: Tomislav Meštrović)

- Recognize and explain biological properties of microorganisms causing infectious diseases, their pathogenicity factors and transmission routes.
- Recognize mechanism of antimicrobial action and microbial resistance; apply laboratory safety principles.
- Apply disinfection and sterilization; explain and apply prevention of hospital infections.
- Explain basics of laboratory diagnostics; recognize specimen types and handle them correctly.
- Apply knowledge in proper specimen transport to microbiology laboratory.

Hygiene and Epidemiology (course coordinator: Tomislav Meštrović)

- Identify and describe hygiene-epidemiological concepts and problems; explain causes of diseases and detection methods.
- Group and distinguish diseases by epidemiological characteristics.
- Recognize importance of hygiene-epidemiological issues based on indicators.
- Interpret community-relevant data and impact of preventive measures over time.
- Implement vaccination.
- Plan, implement and evaluate preventive nursing-practice measures based on community parameters.

Public Health (course coordinators: Tomislav Meštrović, Krunoslav Capak)

- Explain basic concepts of public health (health, health care system, health economics).
- Identify and describe risk factors influencing health across all social groups and analyse their relationships.
- Describe methods of social intervention regarding social security, unemployment and health.
- Interpret relationships between social needs and social protection, co-protection and self-protection.
- Propose and independently plan nursing procedures and measures in preventive and social medicine at all levels of health care.

- Evaluate effects of nursing procedures and measures in preventive and social medicine.

Pathophysiology (course coordinator: Oliver Vasilj)

- Explain general pathophysiological principles, mechanisms of action, causes and ways in which pathophysiological processes occur.
- Recognize mechanisms leading to organ and tissue insufficiency and methods for recognizing symptom severity.
- Explain basics of differential diagnosis.
- Correctly use acquired knowledge and skills.

Gynaecology and Obstetrics (course coordinator: Oliver Vasilj)

- Explain the most common symptoms of gynaecological diseases.
- Explain physiological processes of the menstrual cycle, fertilization, pregnancy and childbirth.
- Identify the nurse's role in recognizing and monitoring symptoms during pregnancy, childbirth, puerperium and postoperative gynaecological care.
- Interpret legal regulations related to pregnancy termination and sexual intercourse with a minor.
- Explain methods of sexually transmitted disease prevention and methods of primary and secondary prevention of malignant diseases of the female reproductive system.

Neurology (course coordinator: Hrvoje Hećimović)

- Apply knowledge of modern management in preventing and treating neurological diseases and their consequences.
- Recognize major neurological disorders and their consequences.
- Recognize means of effectively preventing neurological diseases.
- Provide appropriate care in neurological emergencies.

Nursing Care for Persons with Disabilities (course coordinator: Irena Canjuga)

- Define, explain and differentiate concepts of impairment, disability and handicap.
- List, describe and apply knowledge and skills for specific types of impairments and disabilities.
- Describe, compare and recognize types of assistive devices and apply them according to impairment type.

Nursing Process (course coordinators: Irena Canjuga, Tina Košanski)

- Describe, explain and apply the nursing process.
- Assess patient condition.
- Identify nursing care needs and nursing diagnoses.
- Formulate a nursing diagnosis and nursing-medical problem.
- Create a nursing care plan.
- Implement planned nursing care.
- Evaluate provided nursing care.
- Document nursing care.

Contemporary Care of Patients with Malignant Disease (course coordinator: Valentina Novak)

- Describe the basic principles of tumour development, epidemiology, prevention and early detection.
- Describe the basic principles of tumour development, epidemiology, prevention and early detection. (duplicate in source)
- Participate in the work of an interdisciplinary team and communicate with the patient and family.
- Provide supportive and nursing care and conduct education and prevention of malignant diseases within the population.

Health Education with Methods of Learning and Teaching (course coordinators: Valentina Novak, Eva Brlek)

- Explain the basic methods of learning and teaching.
- Apply didactic principles in conducting health education.
- Assess and plan health-education needs of individuals and groups.
- Implement health-education programmes for individuals and groups and conduct health-promotion activities.

Challenges of Palliative Care (course coordinator: Valentina Novak)

- Recognize emergency conditions in palliative care.
- Plan nutrition for patients requiring palliative care.
- Discuss bioethical and legal issues in palliative care.

Nursing Care of Adults II (course coordinators: Ivana Herak, Valentina Vincek)

- Explain and implement nursing interventions according to set guidelines.
- Explain and implement education of patients and their family members.
- Explain and implement rehabilitation and palliative care.
- Supervise and manage the quantity and quality of nursing care; evaluate and document provided care.

Clinical Practice I (course coordinators: Ivana Herak, Valentina Vincek)

- Describe nursing care of the patient based on human needs.
- Provide nursing care for an immobile patient.
- Perform disinfection and sterilization procedures.
- Measure vital signs, recognize deviations from normal values and perform appropriate interventions.
- Assess bodily excretions, recognize pathological conditions and apply appropriate interventions.
- Administer enteral and parenteral therapy.
- Document fluid and food intake and output, recognize deviations and perform appropriate interventions.
- Document nursing care.

Clinical Practice II (course coordinators: Ivana Herak, Valentina Vincek)

- Collect, assess, analyse and interpret data related to meeting basic human needs in internal medicine, infectious disease and neurology patients.
- Explain the protocol of patient management in the intensive care unit and describe the importance of patient monitoring.
- Explain and participate in planning and implementing therapeutic and diagnostic procedures.
- Recognize pathophysiological changes in internal medicine, neurological and infectious disease patients.
- List conditions that may lead to impaired consciousness.
- Describe and explain the importance of assessing psychomotor development in children.
- Identify pathological conditions in critically ill children.
- Describe and explain the importance of a partnership relationship with a sick child and their parents.

Clinical Practice III (course coordinators: Ivana Herak, Valentina Vincek)

- Define and apply basic rules and procedures of surgical asepsis (clothing, footwear, space, instruments).
- Analyse preoperative psychological preparation of the patient (stress inoculation); perform preoperative physical preparation; prepare operative field; prepare the gastrointestinal tract; prepare and administer premedication; manage preoperative nursing documentation.
- Monitor and document postoperative condition, vital functions and recognize postoperative complications (bleeding, hypovolaemic shock, wound dehiscence/disruption, infection, paralytic ileus, DVT, pulmonary embolism) and postoperative difficulties (pain, nausea, vomiting, abdominal distension, hiccups).
- Check condition and functionality of chest drainage (monitoring, Bülau drainage, negative pressure, fluid balance); participate in haemodynamic monitoring (CVP measurement, preparation); provide nursing care to mechanically ventilated patients (ventilator preparation, airway care, monitoring).
- Observe wound-healing process; assist in dressing surgical wounds; recognize signs of infection; provide stoma care (urostomy, ileostomy, colostomy, tracheostomy).
- Know advanced life support guidelines; differentiate total, partial and enteral nutrition; provide nursing care to neurosurgical patients (mechanical ventilation, intracranial pressure monitoring, positioning); evaluate success of perioperative nursing care.
- Describe symptoms of mental disorders and risk factors; choose interventions for basic needs; assess possible simulation/disimulation; list therapeutic approaches and psychotropic drugs; identify adverse drug effects; use mental-status assessment scales; prepare for ECT; organize group work.
- Create counselling plan for patient and family; plan care for persons with addictions; demonstrate safety methods during aggressive behaviour; identify symptoms indicating suicidal behaviour; select interventions for rehabilitation and resocialization; organize continuation of community care.

Stomas and Incontinence – Challenges in Nursing Care (course coordinator: Valentina Vincek)

- List types of stomas and their function, and explain the concept, causes and importance of knowledge about urinary incontinence in nursing practice.
- List and apply necessary aids for the care of a specific type of stoma.
- Recognize and prevent risk factors for the development of incontinence and complications related to stomas, and gain knowledge required to educate patients with stomas and urinary incontinence.

Health and Physical Activity (course coordinator: Valentina Vincek)

- Describe the impact of physical activity on the health of the musculoskeletal, cardiovascular and respiratory systems.
- Explain the relationship between physical activity and the maintenance of mental health.
- Define and explain the role of bachelor-level nurses in health promotion and prevention of chronic non-communicable diseases through physical activity.

Assessment and Management of Pain (course coordinators: Višnja Neseck Adam, Valentina Vincek)

- Identify and explain the definition of pain, the characteristics of pain, and the types of pain; describe the classification of pain with regard to its causes.
- Explain and differentiate the pain experience with regard to its intensity and duration; know and apply methods of pain assessment (rating scales, pain questionnaires, pain drawings, observation protocols).
- Know and justify the influence of age on the experience and expression of pain; know and apply techniques and methods of pain relief and elimination; organize care for patients with acute and chronic pain.

Nursing Care of the Mother and Newborn (course coordinators: Ivana Živoder, Mateja Križaj Grabant)

- Define needs for nursing care of the pregnant woman, woman in labour, puerperal woman and newborn based on data collection, assessment, analysis and interpretation.
- Educate pregnant women, women in labour and puerperal women on nutrition, physiological events and physical activity aimed at promoting health and preventing disease during and after pregnancy.
- Explain problems in the antenatal, intrapartum and postpartum periods based on data collection, assessment, analysis and interpretation.
- Define and explain methods of childbirth, preparation of pregnant women for childbirth, possible complications and normal postpartum period and complications.
- Describe physiological changes in the newborn in the early neonatal period and at discharge.
- Define conditions requiring emergency intervention in the pregnant woman, puerperal woman and newborn.

Nursing Care of the Child (course coordinators: Ivana Živoder, Mateja Križaj Grabant)

- Assess and understand the health, educational and supportive needs of children and parents/caregivers in order to maintain physical and mental health and prevent disease; recognize physical, psychosocial, spiritual and cultural factors affecting child health.
- Apply the nursing process through data collection, assessment, analysis and interpretation to ensure individualized, high-quality care for healthy and sick children.
- List and explain psychomotor-development stages, parenting styles, proper nutrition and childcare principles through therapeutic communication.
- Describe and understand effects of hospitalization on children at various stages of development, and describe nursing care for acute and chronic diseases across all organ systems.
- Demonstrate methods of drug administration in children, preparation for diagnostic/therapeutic procedures and the nurse's role in these procedures.
- Define and explain paediatric emergencies and describe nursing care for critically ill children.
- Define and explain pain assessment and pain-management methods in children and describe nursing care of terminally ill children.

Holistic Care in Nursing Practice (course coordinator: Tina Košanski)

- Describe and understand the concept, meaning and importance of holistic care in nursing practice.
- Categorize nursing interventions and patient needs into appropriate dimensions of care.
- Prepare a nursing-care plan in accordance with the patient's physical, psychological, social and spiritual needs.

Surgery, Traumatology and Orthopaedics (course coordinator: Željko Jeleč)

- Gain knowledge of the basics of surgical diagnostics and therapy.
- Gain insight into symptomatology, pathology, pathophysiology, diagnostics and therapy of major surgical diseases.
- Acquire basic skills for recognizing symptoms and signs of surgical diseases, i.e., perform basic physical examination.
- Acquire skills in collecting reliable and relevant data in patient treatment and participate in surgical treatment.

Anaesthesiology, Resuscitation and Intensive Care (course coordinator: Nikola Bradić)

- Recognize and undertake appropriate measures with life-threatened patients, including patients in cardiac or respiratory arrest.
- Assess anaesthesiology procedures.
- Explain the mode of operation and types of patients treated in intensive-care units.

Nursing Interventions in the Management of Polytrauma (course coordinators: Nikola Bradić, Zoran Žeželj)

- Assess the severity of a polytraumatized person's condition (examination, inspection, scoring with defined scoring systems).
- Perform triage of polytraumatized persons in mass-casualty incidents.
- Determine the order of injury management in pre-hospital and hospital settings.
- Determine the order of procedures and assess vital functions in polytraumatized patients.
- Apply basic procedures and treatment measures within the nurse's/technician's scope of work.

Basic and Advanced Resuscitation of Adults and Children (course coordinators: Nikola Bradić, Zoran Žeželj)

- Recognize basic symptoms and signs of cardiorespiratory arrest in adults.
- Apply different methods of opening and maintaining the airway in adults and children.
- Describe and explain life-threatening cardiac rhythm disorders on the monitor.
- Apply external cardiac massage and ventilation for patients in cardiorespiratory arrest.
- Independently use a manual defibrillator and determine appropriate energy levels for adults and children.
- Calculate drug doses and defibrillation energy for paediatric advanced life support (APLS).
- Demonstrate resuscitation procedures in special patient groups – pregnant women, trauma patients, drowning victims.
- Define the sequence of procedures during resuscitation.

Nursing Care in Bone and Joint Injuries and Immobilization (course coordinator: Ivana Herak)

- Describe and understand basic types of bone and joint injuries and care for patients with such injuries.
- Describe types of immobilization and methods of applying immobilization, and describe complications in patients requiring immobilization.
- Describe and explain nursing interventions for immobilized patients and describe issues related to conservative treatment.

Home Nursing Care (course coordinator: Zoran Žeželj)

- Describe the historical development and organization of home-nursing care.
- Interpret legal regulations related to home-nursing care.
- Apply an ethical approach to the patient based on needs, possibilities and environment.
- Explain and implement diagnostic, therapeutic and rehabilitation procedures in home-nursing care based on accepted guidelines and standards.
- Develop coordination with a multidisciplinary team in patient care.
- Apply prescribed nursing documentation.

Patient Safety in Health Care (course coordinator: Zoran Žeželj)

- Define and differentiate the concepts of 'adverse event', 'unexpected adverse event', 'near miss', 'quality indicators' and 'safety culture', and explain the importance of safety culture and ways to develop it.
- Assess risks in work and technology use and apply standards ensuring patient safety.
- Analyse errors and act according to protocols aimed at preventing them.

Continuous Nursing Care (course coordinator: Zoran Žeželj)

- Describe the historical development of continuous care and discharge planning and explain the importance of cooperation between primary and secondary care.
- Define the concept of discharge-planning services and the nurse's competences for planned discharge; explain the training programme for nurses in discharge planning.
- List and explain the focuses of discharge planning and the steps in the discharge-planning process.
- Understand organisation, coordination, documentation and financial management of continuous nursing care; explain quality management of discharge and continuous care according to accreditation standards.

- Understand and explain the IDEAL hospital discharge strategy; present guidelines for discharge planning and continuous care; apply prescribed nursing documentation and research methods in continuous nursing care.