[Medicinski fakultet u Rijeci]

Curriculum
2021/2022

[Za kolegij]

Paediatrics

Study program:	**Medical Studies in English (R)** [Sveučilišni integrirani prijediplomski i diplomski studij]
Department:	**[Katedra za pedijatriju]**
Course coordinator:	**izv. prof. dr. sc. Lah Tomulić Kristina, dr. med.**
Year of study:	**5**
ECTS:	**11**
Incentive ECTS:	**0 (0.00%)**
Foreign language:	**Possibility of teaching in a foreign language**

Course information:

Pediatrics is a compulsory course in the fifth year of the Integrated Undergraduate and Graduate University Study of Medicine in English. It consists of 40 hours of lectures, 70 hours of seminars and 107 hours of practicals (11 ECTS credits).

Course objective: The course Pediatrics aims to acquire basic knowledge and skills in pediatrics. Pediatrics is a medical discipline defined by the object of interest - the child, from birth to maturity. The interest of pediatrics is focused on the child as an individual and on the wholepediatric population. The tasks of pediatrics are multiple: study and surveillance of the growth and development of children, protection and improvement of children's health, prevention and cure of diseases, and rehabilitation of disabled children. Pediatrics is based on the unitarist approach, combining three main components of children's health care - prevention, treatment, and rehabilitation. The unique significance of pediatrics is that delivering health care to the youngest and most vulnerable age largely determines the health of future generations of adults.

The course provides specific knowledge and practical skills in pediatrics at the level required for a future primary health care practitioner, enabling students to basic diagnostic and therapeutic approaches to a sick child, initial management of the most common pediatric diseases, emergency care in pediatrics, disease prevention and environmental health hazards.

Course content:

Propedeutics in pediatrics is focused on the peculiarities of young age, pediatric history, and physical examination of the child from infancy to adolescence and acquiring communication skills with children and parents/guardians. The main contents are the definition of pediatrics, the development and future of pediatrics in Croatia and the world, medical history in pediatrics, physical examination of the child, emotional development of the child, medical psychology of the sick child, the most common psychological disorders of children and adolescents and abused and neglected child.

General, social, and preventive pediatrics: General pediatrics includes theoretical and practical aspects of the physiology and pathology of growth and development, nutrition and nutritional disorders, assessment of nutritional status and nutritional disorders, and water, electrolyte, mineral, and acid-base disorders.

Social pediatrics studies the interaction of the child and the environment and the environmental factors that affect the child's health at the individual and population levels. Preventive pediatrics combines knowledge about the possibilities of preventive activities and improving children's health. The main contents are basics of child growth and development, growth and development by age, growth retardation, tall stature, nutrition of infants, preschool and school children, adolescent nutrition and its disorders, nutritional assessment, malnutrition, obesity, vitamin intake and metabolism-related diseases, nutrition of the sick child, water, electrolyte, mineral and acid-base disorders, vital statistics data, maternal and child health care, active immunisation, newborn screening and symptomatic treatment of children.

Special pediatrics is the largest unit that includes pathological conditions related to age (infancy, preschool age, school age, puberty, and adolescence) and pathological conditions associated with certain organ systems, with special attention to those conditions that differ from adults. Special attention is paid to recognising and managing emergencies in pediatrics, the chronically ill child, and the health care transition. The main contents are hereditary and prenatally acquired diseases, metabolic diseases, healthy newborn infants, diseases of the newborn, respiratory diseases, allergy and allergic diseases, immunity and immunodeficiencies, cardiovascular diseases, rheumatic diseases, diseases of the blood, malignant diseases, diseases of the urinary system, diseases of the endocrine system, diseases of the digestive system, liver disease, neuromuscular diseases, critically ill child and chronically ill child.

Course learning outcomes:

I. **Cognitive domain- knowledge**

1. To define tasks and unitarist approach to pediatrics
2. To describe the basic vital statistical terminology and organisation of maternal and child healthcare
3. To recognise the importance of prevention in children’s health
4. To associate the main symptomsand signs of the most common childhood diseases with specific clinical conditions and syndromes
5. To select appropriate diagnostic procedures for the most common pathological conditions and diseases in pediatrics
6. To demonstrate the abilityfor treatment planningfor the most common pediatric diseases
7. To analyse and evaluate the courseof treatment, its efficacy and outcomes

II. Psychomotor domain - skills

1. To practice taking a pediatric history
2. To apply physical examination of the child
3. To recognise the average physical growth and development of the child and disturbances in growth and development
4. To perform basic practical diagnostic and therapeutic procedures under supervision (taking of biological samples, blood pressure measurement, body temperature measurement, procedures with a febrile child, application of drugs in

children)
5. To perform basic resuscitation skills of childrenand management of the most common emergencies in pediatrics
6. To set optimal therapeutic procedures for the most common diseasesin children (with assistance)
7. To participate in a multidisciplinary approachto the pediatric patient

Course structure

Classes (lectures, seminars, practicals) are held in the 10th semester of the study for eight weeks at the Department of Pediatrics, Clinical Hospital Center Rijeka – locality Sušak. Lectures are held in the first two weeks, and seminars and practicals are held for seven weeks.

Practicals are held at the Clinic for Pediatrics - Sušak (Vjekoslava Dukića 7), Skills Lab Simulation Centre (Kabinet vještina), Adress: Zgrada Sveučilišnih odjela, Radmile Matejčić 2, Rijeka.

The first two weeks of lectures are common to all students. During lectures, students gain a theoretical overview of the main contents of the course. Seminars are problem-oriented, with case presentations. Students should regularly attend seminar classes and theoretically prepare for seminars according to the attached schedule (interactive courses). In case of an unfavourable epidemiological situation, it is possible to hold classes online.

Practicals are held for six weeks. Students are divided into groups of 5-7 students per teacher. During the practicals, students directly learn skills and practical knowledge. The first four days are practicals in pediatric propedeutics, followed by a rotation of pediatric activities and teachers, allowing students to learn about broad casuistic in pediatrics.

All students will do practicals in the Skills Lab Simulation Centre. Each group will do one day of practicals in the skills cabinet. They will be divided into three subgroups and practice different skills on the models: resuscitation in children, resuscitation of the newborn at birth, application of an intraosseous needle, safe defibrillation, and intubation.

Students will be provided with all necessary information about classes regularly.

List of assigned reading:

Nelson Essential of Pediatrics, 9th Edition April 2022

List of optional reading:

Bernstein D, Shelov SP. Pediatrics for Medical Students. 3rd edition. Wolters Kluwer -Lippincott Williams & Wilkins, Philadelphia, USA, 2011. Chaurasia DD. Pediatrics For Students and Practitioners. 2nd edition. CBS Publishers & Distributors Pvt Ltd, India, 2021.

Curriculum:

Student obligations:

Students are required to attend classesregularly (lectures, seminars, practicals). Attendance at all forms of teaching is checked.

A student has the right to miss up to 30% of classes (for health reasons). A medical certificate justifies the absence from classes. Students who miss more than 30% of classes cannot complete the course.

Use of protective equipment and instruments: Students are required to attend practicals in clean medical coats and to bring a stethoscope. Protective masks, latex gloves, and other protective equipment will be used depending on the epidemiological situation.

If a student has a possible contagious disease (common cold, acute enteral infection, etc.) and comes to the practical, they should inform the teacher about their health condition, who will assess the risk of student contact with outpatients and hospitalized patients.

Recording and photographing patientsand staff are not allowed.

Students are required to respect the good practice of academic behavior with colleagues, teachers and other staff of the Department of Pediatrics.

Exam (exam taking, description of the written/oral/practical part of the exam, point distribution, grading criteria):

The ECTS grading system is carried out by the current University of Rijeka Study Regulations and the Student Regulations at the Faculty of Medicine Rijeka (adopted by the Faculty Council of the Faculty of Medicine Rijeka). The ECTS grading scale is defined in the European Credit Transfer and Accumulation System (ECTS) framework by the European Commission.

The activity and knowledge of students are evaluated and assessed during thecourse and the final exam. Out of 100 points, a student can achieve a maximum of **10 points during the course (on practicals)**, **10 points on the student seminars, 20 points on the written exam**, **10 points on the practical exam** and up to **50 points on the final oral exam**. Student progress assessment uses ECTS (D-A and F) and a numerical system (2-5 and 1). Credits are awarded only when the course has been completed, and all required examinations have been successfully taken.

During the course, the student acquirespoints by assessing the knowledge and activity on the practicals, in the written exams, and achieving success in student seminars. Teachers evaluate achievement in practicals, and the student is awarded a maximum of **10 points**. The assessment is based on the student's attendance, activities, knowledge, and skills acquired and demonstrated during the practicals.

Achievement in practical exams during the course is evaluatedaccording to the following table:

Rating	Points
excellent (5)	10
very good (4)	8
good (3)	7
sufficient (2)	5
insufficient (1)	0

Student seminars: Students will choose a patient they saw during the exercises. The presentation of the case (anamnesis, clinical picture and laboratory findings, as well as the course of the disease and treatment) will be given in the seminar. Students will present all this in a PowerPoint presentation to other students. The seminar and presentation should be emailed to their assistant at least 3 days before the presentation day. The written seminar, the PowerPoint presentation, the mode of presentation, the knowledge and the teamwork are evaluated.

Achievement in student seminars is evaluatedaccording to the following table:

Rating	Points
excellent (5)	10
very good (4)	8
good (3)	7

sufficient (2)	5
insufficient (1)	0

The Written exam (up to 20 points) is held after the practicals and seminars. It has 60 multiple-choice questions. The time for the written exam is one hour. A student has passed a written test if they correctly answer at least 50% of the questions.

The resultsof the Written exam are evaluated according to the following table:

Correct answers	Rating	Points
54 - 60	excellent (5)	20
45 - 53	very good (4)	17
36 - 44	good (3)	14
30 - 35	sufficient (2)	10
≤ 29	insufficient (1)	0

A student who achieves five or more points during the course and passes the written exam can take the final exam. The final grade reflects the points earned during the course and on the final exam. If the final exam is graded as insufficient, it is considered that the student did not pass, regardless of the pointsearned during the course.

A student who achieves less than 5 points during the course is not entitled to take the final exam and must re-enrol in the course. A student who didn't attend student seminars or has less than 29 answers on a written exam can not take the final exam.

The final exam consists of a practical and a theoretical part. The practical part of the exam is a practical test of knowledge, including the patient's physical examination and laboratory analysis. The student can achieve a maximum of 10 points on the final practical exam. The successful practical part of the final exam is a condition for taking the theoretical part of the final exam. If the student did not pass the oral exam, they must repeat it on thefollowing final exam. The final exam's theoretical part covers the course's teaching material.

A student who passed the final practical part and did not pass the theoretical part on the next final exam must not repeat the practical part of the final exam.

The final practical exam (up to 10 points) is graded according to the followingtable:

Rating	Points
excellent (5)	10
very good (4)	8

good (3)	7
sufficient (2)	5
insufficient (1)	0

The final oral exam (up to 50 points) is graded according to the followingtable:

Result	Points
excellent (5)	50
very good (4)	40
good (3)	30
sufficient (2)	25
insufficient (1)	0

The final grade is the sum of ECTS grades achieved during the course and on the final exam. It is expressed by the corresponding percentage, the letter of the alphabet and the numerical grade according to the followingtable:

Final grade	
A (90-100%)	excellent (5)
B (75-89,9%)	very good (4)
C (60-74,9%)	good (3)
D (50-59,9%)	satisfactory (2)

Other notes (related to the course) important for students:

Teaching content and other information related to the course Pediatrics is posted on the Merlin platform. Additional information can be obtained continuously during classes from the course coordinator, by personal contact or via email (the e-mail addresses of the teaching staff of the Department of Pediatrics can be found on the faculty website).

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- Office hours for students:
  Department Office – Monday–Friday from 8 am to 4 pm

COURSE HOURS 2021/2022

Paediatrics

List of lectures, seminars and practicals:

EXAM DATES (final exam):
