Sveučilište u Rijeci • University of Rijeka
Trg braće Mažuranića 10 • 51 000 Rijeka • Croatia
T: +385 (0)51 406 500 • F: +385 (0)51 406 588
W: www.uniri.hr • E: ured@uniri.hr

Table 2

3.2. Course description

Basic description		
Course coordinator	**Prof.dr.sc. Ines Mrakovčić-Šutić**	
Course title	**Methods of pain measurement**	
Study programme	**Nursing graduated study**	
Course status	compulsory	
Year	**1.**	
ECTS credits and teaching	ECTS student 's workload coefficient	2,5 ECTS
	Number of hours (L+S)	15P + 15S

1. COURSE DESCRIPTION

1.1. Course objectives

The objectives of this course include introducing students to the basic characteristics of different types of pain. The characteristics of pain receptors and their models of activation will be explained. The pain transmission pathways and its monitoring mechanism will be shown to the students. The methods of measuring intensity of pain will be discussed. Special attention will be paid to pharmacological and non-pharmacological methods of pain treatment.

1.2. Course enrolment requirements

There are no course enrolment requirements.

1.3. Expected course learning outcomes

It is expected that at the end of this course each student will be able to:

1. Determine the type of pain
2. Assess pain intensity
3. Determine the physical therapy treatments of certain types of pain
4. Identify pharmacotherapeutic and non-pharmacotherapeutic treatments of certain types of pain

It is expected that at the end of this course each student is supposed to acquire specific skills and competences:

1. To identify the specific type of pain
2. To apply various methods of treatment of pain

1.4. Course content

1. Definition and classification of pain
2. Pain receptors
3. Pathways pain
4. Methods of pain measurement
5. Pain assessment
6. Analgesic system
7. Treatment of various forms of pain (pharmacological and non-pharmacological methods of pain treatment)

1.5. Teaching methods	☐ x lectures ☐ x seminars and workshops	☐ x individual assignment ☐ x multimedia and network

	☐ exercises ☐ long distance education ☐ fieldwork	☐ laboratories ☐ mentorship ☐ other
1.6. Comments	Teaching is carried out in the form of lectures and seminars. During seminars student actively discusses physiological and pathophysiological mechanisms of pain. Student is obliged to prepare course material that is to be discussed during seminars. Professor evaluates student participation in the seminar work (demonstrated knowledge, comprehension, capability to set a problem, drawing conclusions, etc.). "Earned" credits add up to credits received at the final exam of the subject in case. Work of each group of students is overlooked by a tutor who's privilege and duty is to invite to discuss matters with students who are unsuccessful during teaching period.	

1.7. Student's obligations

Regular attendance to lectures and seminars. Preparation of the course content to be discussed during seminars and practicals.

1.8. Evaluation of student's work

Course attendance	5%	Activity/Participation	10%	Seminar paper	15%	Experimental work	
Written exam	15%	Oral exam	15%	Essay		Research	
Project		Sustained knowledge check	40%	Report		Practice	
Portfolio							

1.9. Assessment and evaluation of student's work during classes and on final exam

Evaluation would be performed according the actual Rules on studies of University of Rijeka (approved by the Senat) and the Faculty of medicine (approved by the Faculty council). In this system, the overall students' outcome is made up 70% of their achievement during the course itself and 30% of the success in the final exam.
Achievements during the course will be evaluated by: a) sustained knowledge check (partial tests, partial exams and other activities in classes), b) activity during the course, c) seminar paper or presentation, d) course attendance

1.10. Assigned reading (at the time of the submission of study programme proposal)

1. Guyton AC, Hall JE. Medicinska fiziologija, Medicinska naklada, 10th Edition, Zagreb, 2006.
2. Gamulin S, Kovač Z. i Richardson K. Patofiziologija, Medicinska naklada, 7th Edition, Zagreb, 2010.
3. Z. Kovač Z, S Gamulin et al. Patofiziologija. Zadatci za problemske seminare, Medicinska naklada, 2nd Edition, 2006.

Study programs, which are outside of recommended books, will be presented as additional literature on web pages or share portal of the Department.

1.11. Optional / additional reading (at the time of proposing study programme)

1. Judaš M, Kostović I. Temelji neuroznanosti, MD, Zagreb, 1997.
2. Jukić M. i sur. Klinička anesteziologija, Medicinska naklada, Zagreb, 2005.

1.12. Number of assigned reading copies with regard to the number of students currently attending the course

Title	*Number of copies*	*Number of students*

1.13. Quality monitoring methods which ensure acquirement of output knowledge, skills and competences

1. **Conducting student surveys and evaluation of results.** At the end of each course student surveys will be conducted to evaluate the quality of teaching and teachers who participate in the delivery of the course with more than 30%. Evaluation procedures are systematically carried out by Teaching Quality Assurance Committee at our Faculty.
2. **Analysis of the results achieved at exams.**

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3. **The mentor system.** Each student group is assigned a mentor who follows the students throughout the course.