

<i>Name of the course</i>	Laparoscopic procedures in clinical practice			Code	
<i>Type of study program Cycle</i>	Integrated studies – Medicine			Year of study	5
<i>Credits (ECTS) :</i>	1,5	<i>Semester</i>	9	Number of hours per semester (l+e+s)	(30) 14+10+6
<i>Status of the course:</i>	elective	<i>Preconditions:</i>		<i>Comparative conditions:</i>	
<i>Access to course:</i>	5 th year students			<i>Hours of instructions:</i>	According to schedule
<i>Course teacher:</i>	Assistant professor Ivo Soldo, MD, PhD				
<i>Consultations:</i>					
<i>E-mail address and phone number:</i>					
<i>Associate teachers</i>					
<i>Consultations:</i>					
<i>E-mail address and phone number:</i>					
<i>The aims of the course:</i>	To introduce students with laparoscopic surgery, a new surgical technique that allows performing surgical procedures in minimally invasive manner and to introduce them with numerous benefits of this method of surgery.				
<i>Learning outcomes (general and specific competences):</i>	<p>General outcomes: Understanding the importance of minimally invasive surgery in modern surgical procedures. Understanding the indications for laparoscopic procedures. Remembering and applying the practical skills using the instruments for endoscopic surgery.</p> <p>Specific outcomes: Applying the knowledge about the instruments and equipment for endoscopic surgery. Understanding and applying knowledge on the simulator of laparoscopic procedures. Analyzing the selected seminar paper on minimally invasive surgery. Remembering and understanding the numerous possibilities of minimally invasive surgery.</p> <p>The outcomes will be evaluated on practical, written and oral exam.</p>				
<i>Course content (Syllabus):</i>	The elective course consists of lectures, followed by seminars and exercises. During exercises students can practice on simulator for laparoscopic surgery.				
<i>Format of instruction (mark in bold)</i>	Lectures	Exercises	Seminars	Independent assignments	

	Consultations	Work with mentor	Field work	Other
	Remarks:			
Student responsibilities	Students' obligations: <ul style="list-style-type: none"> - Seminar paper - Practical work with the instruments for laparoscopic surgery, work on simulator - Attendance on classes, it is allowed to be absent from 20% of classes 			
Screening student work (mark in bold)	Class attendance	Class participations	Seminar essay	Practical training
	Oral exam	Written exam	Continuous assessment	Essay
Detailed evaluation within a <i>European system of points</i> <i>(Example)</i>				
STUDENTS RESPONSIBILITIES	HOURS	PROPORTIONS OF ECTS CREDITS	PROPORTION S OF MARK	
Class attendance and participations	30	1		
Seminar essay	30	1	20%	
Written exam	50	2	60%	
Oral exam	30	1	20%	
Further clarification: The final assessment will be carried out with the multiple choice test and the oral exam. Passed written part of the exam is a precondition for the oral exam. According to the regulations of the study, final grade is obtained: A = 91-100% 5 B = 79 to 90% 4 C = 67 to 78% 3 D = 55 to 66% 2 F = 0 to 54% 1				
Required literature:	Selected chapters from textbooks and monographs. <ol style="list-style-type: none"> 1. Čala Z,Cvitanović B, Velnić D,Perko Z. Laparoscopic surgery in Croatia. Croat J Gastroenterol Hepatol 1996;5: 11-3. 2. Čala Z,Perko Z. Five years of laparoscopic surgery in Croatia. Liječn Vjes 1999; 121: 204-7. 3. Čala Z,Velnić D, Perko Z, Rašić Ž. Laparoscopic cholecystectomy using three trocars and European technique.Cirurgia Espanola 1997; 61: 433-5. 4. Adnel J, Grabner V, Zadrobilek E, Twardy T, Leitner K, 			

	<p>lackner FX. Cardiopulmonary effects of laparoscopic cholecystectomy. <i>Anaest Analg</i> 1992; 74:S8</p> <p>5. Mršić V, Nesek- Adam V, Budinščak I, Smiljanić A, Čala Z, Rašić Ž. Effect of abdominal drainage on postoperative shoulder pain in laparoscopic Cholecystectomy. <i>Croat J Gastroenterol Hepatol</i> 1997; 6: 41-3.</p>
Optional literature:	
Additional information about the course	<p>Monitoring methods of teaching quality:</p> <ul style="list-style-type: none"> - student questionnaire - analysis the quality by students and teachers - exam results analysis - report of the office for teaching quality - external evaluation (visit of team for quality control)

Annexes: calendar classes

<i>The number of teaching units</i>	TOPICS AND LITERATURE
I.	Title: The development of laparoscopy and laparoscopic surgery. The development of laparoscopic surgery in Croatia. Laparoscopic equipment and instruments. The definition of advantages and limitations of laparoscopy.
	Short description:
	Literature: required
II.	Title: Anesthesia in laparoscopy. The pathophysiology of pneumoperitoneum. Cardiovascular and hemodynamic disorders. Respiratory disorders, disorders of intra-abdominal organ perfusion. The surgical trauma in laparoscopic surgery.
	Short description:
	Literature: required
III.	Title: Preparation and selection of patients for laparoscopy. Position of the surgical team, patients and equipment during laparoscopic surgery.
	Short description:
	Literature: required
IV.	Title: The basic laparoscopic technique. Laparoscopy in gastroenterology, orthopedics, urology, ENT, pediatric surgery.
	Short description:
	Literature: required
V.	Title: Laparoscopic cholecystectomy and appendectomy.
	Short description:
	Literature: required