

Faculty of Medicine in Rijeka

**Curriculum
2023/2024**

For course

Clinical Anatomy of the Pelvis and Inguinal Region

Study program: **Medical Studies in English (R)** (elective)
University integrated undergraduate and graduate study
Department: **Department of Anatomy**
Course coordinator: **prof. dr. sc. Marić Ivana, dr. med.**

Year of study: **1**
ECTS: **1.5**
Incentive ECTS: **0 (0.00%)**
Foreign language: **No**

Course information:

The course is intended for medical students who want to expand their knowledge of the anatomy of the pelvis and inguinal region in the field of clinical anatomy. The goal is to renew knowledge of pelvic anatomy and to acquaint students with important clinical aspects of pelvic anatomy that will be used in their clinical training. Upon completion of this course, the student will be able to describe and spatially place the organs of the small pelvis, see the importance of the structure and topography of the organs in understanding the development of the disease and its symptoms, establishing the diagnosis and surgical treatment of the disease.

After taking the course, students will know:

- list the muscles of the abdominal wall and the muscles of the pelvis
- explain the starting points, grips and function of the muscles of the abdominal wall and pelvis
- explain the sheaths of the rectus abdominis muscle and the inguinal ligament
- explain the boundaries and content of the inguinal canal
- understand testicular descent during intrauterine development
- understand the mechanism of inguinal hernia formation
- understand the difference between direct and indirect inguinal hernia and femoral hernia
- list the branches of the internal iliac artery
- explain the venous plexuses of the rectum
- describe the external and internal appearance of the pelvic organs
- understand the topographic relationships in the pelvis

By repeating and studying the anatomy of these regions and organs, students will learn to apply knowledge of topographical anatomy in clinical practice. The students will apply the acquired knowledge from this subject during further education and work in clinical practice, especially in the field of surgery, gynecology and urology.

Presentation of clinical problems in the pelvis and inguinal region and their explanation based on anatomical knowledge: incontinence, uterine prolapse, infertility, hemorrhoids, hernias.

Review of frequent diseases in the pelvis and inguinal region: tumor and inflammatory diseases of the pelvic organs, hernias - occurrence and treatment, strengthening and weakening of the inguinal canal.

Anatomy of the organs of the small pelvis: male and female genitalia (organa genitalia masculina et feminina), rectum, urinary bladder (vesica urinaria).

Description of individual pelvic organs: structure, vascularization, innervation and topography.

Anatomy of the inguinal region: description of the structure of the anterior abdominal wall, inguinal and femoral canals.

List of assigned reading:

1. Paulsen F., Bockers TM., Waschke J. Sobotta Anatomy Textbook, 1 st Edition.
2. Drake R, Wayne Vogl A., Mitchell AWM. Gray's Anatomy for Students. Elsevier, 2019.
3. Sobotta , Atlas of human anatomy, Vol. 2, Urban & Schwarzenberg, Munich, 1989.
4. Netter FH. Netter Atlas of Human Anatomy: Classic Regional Approach. Elsevier, 2022.
5. Gilroy AM, McPherson BR, Wikenheiser J. Atlas of Anatomy. Thieme Medical Publishers Inc, 2020.

List of optional reading:

1. Moor KL. Clinically oriented anatomy. Williams & Wilkins, Baltimore, 1992. 3rd edition.
2. Gray's anatomy: The anatomical basis of clinical practice. Elsevier, Churchill Livingstone, Edinburgh, 2005.
3. Seeley RR, Stephens TD, Tate P: Anatomy & Physiology. McGraw-Hill Companies, Inc, Boston, 2003, 6th edition.

Curriculum:

Lectures list (with titles and explanation):

L1. Introduction to the organization of the course.

Students will familiarize themselves with the p+performance plan of the elective course

L2. Anatomy of the inguinal region: description of the structure of the anterior abdominal wall, inguinal and femoral canal.

The student will list the muscles of the abdominal wall. Explain the starting points, grips and function of the muscles of the abdominal wall. Explain the sheaths of the rectus abdominis muscle and the inguinal ligament. Explain the boundaries and content of the inguinal canal. Understand testicular descent during intrauterine development. Understand the mechanism of inguinal hernia formation and differentiate between direct and indirect inguinal hernia.

L3. Clinical anatomy of the pelvis.

The student will enumerate and describe the muscles of the pelvis and explain the starting points, grips and function of the pelvic muscles. The student will describe the external and internal appearance of the pelvic organs and understand the topographic relationships of the organs in the pelvis.

L4. Clinical Anatomy of Inguinal Region.

Students will analyze the clinical aspect of structure in inguinal region.

Seminars list (with titles and explanation):

Student presentations 1. Muscles of the anterior abdominal wall; Hernias of the anterior abdominal wall; Femoral hernias; Inguinal canal; Direct and indirect inguinal hernia

Describe the muscles of the abdominal wall, discuss hernias.

S2. Student presentations: Diaphragma pevis; Diaphragm urogenitale; Pelvis - walls; Ovary; Fallopian tube, tubal ligation

Describe the muscles that make up the pelvis and urogenital diaphragm. Describe the wall of the pelvic cavity. List and describe the organs of the female pelvis.

S3. Student presentations: Uterus; Uterine fixation device; Ectopic pregnancy.

Describe the parts of the uterus and the fixation apparatus of the uterus. Describe and discuss the incidence of ectopic pregnancy.

S4. Student presentations: Testis, epididymis; Ductus deferens, vesiculae seminales, vasectomy; Varicocele, hydrocele; Funiculus spermaticus, lig. teres uteri; Prostate, bulbourethral glands; Prostate hypertrophy; Urethra (male and female)

Describe the main male reproductive organs, list the contents of the spermatic cord. Describe varicocele and hydrocele disorders and prostate hypertrophy. Explain the difference between male and female urethra.

S5. Student presentations: A. iliaca interna - back trunk, branches; A. iliaca interna - anterior trunk, branches; A pudenda interna; Ischioanal fossa, anal triangle

Describe and enumerate the branches of the pelvic arteries: Describe and explain the clinical significance of the fossa, fossa ischioanal.

S6. Student presentations: Urinary bladder; Rectum; Veins of the pelvis (rectum); N. pudendus

Describe the bladder and rectum. Describe the veins of the rectum and n. pudendus and explain their clinical significance.

S1-3. Student presentations. Inguinal Canal and Inguinal Hernias. Uterus. Ectopic pregnancy. Ovarium & Tuba Uterina. Funiculus Spermaticus and Vasectomy. Prostate and Hypertrophy of prostate. Testis, Epididymis, Varicocele & Hydrocele. Urethra.

Describe the anatomy of Inguinal Canal. Describe and discuss the direct and indirect inguinal hernias. Describe the parts of the uterus and the fixation apparatus of the uterus. Describe and discuss the incidence of ectopic pregnancy. Describe the ovarium and parts of the tuba uterina. Describe the coverings and content of funiculus spermaticus. Discuss the vasectomy. Describe the prostate and hypertrophy of prostate. Describe the testis and epididymis. Varicocele & Hydrocele: Causes, Symptoms, and Diagnosis. Describe the female and male urethra.

Student obligations:

Students are required to regularly attend classes, study the assigned literature and continuously solve clinical problems related to the course content. Students have the opportunity to work individually with the teacher.

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

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

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COURSE HOURS 2023/2024

Clinical Anatomy of the Pelvis and Inguinal Region

Lectures (Place and time or group)	Seminars (Place and time or group)
07.05.2024	
L1. Introduction to the organization of the course.: • ONLINE (17:00 - 18:00) ^[134] ◦ CAPEB	
prof. dr. sc. Marić Ivana, dr. med. ^[134]	
13.05.2024	
L2. Anatomy of the inguinal region: description of the structure of the anterior abdominal wall, inguinal and femoral canal.: • ONLINE (16:00 - 17:00) ^[134] ◦ CAPEB	
prof. dr. sc. Marić Ivana, dr. med. ^[134]	
20.05.2024	
L3. Clinical anatomy of the pelvis.: • ONLINE (16:30 - 17:30) ^[134] ◦ CAPEB	
prof. dr. sc. Marić Ivana, dr. med. ^[134]	
27.05.2024	
	S1-3. Student presentations. Inguinal Canal and Inguinal Hernias. Uterus. Ectopic pregnancy. Ovarium & Tuba Uterina. Funiculus Spermaticus and Vasectomy. Prostata and Hypertrophy of prostate. Testis, Epididymis, Varicocele & Hydrocele. Urethra.: • ONLINE (17:15 - 19:00) ^[134] ◦ CAPEB
prof. dr. sc. Marić Ivana, dr. med. ^[134]	
24.06.2024	
L4. Clinical Anatomy of Inguinal Region.: • Surgery Rijeka - Lecturer (15:00 - 17:00) ^[486] ◦ CAPEB	
prof. dr. sc. Grebić Damir, dr. med. ^[486]	

List of lectures, seminars and practicals:

LECTURES (TOPIC)	Number of hours	Location
L1. Introduction to the organization of the course.	1	ONLINE
L2. Anatomy of the inguinal region: description of the structure of the anterior abdominal wall, inguinal and femoral canal.	1	ONLINE
L3. Clinical anatomy of the pelvis.	1	ONLINE
L4. Clinical Anatomy of Inguinal Region.	2	Surgery Rijeka - Lecturer

SEMINARS (TOPIC)	Number of hours	Location
Student presentations 1. Muscles of the anterior abdominal wall; Hernias of the anterior abdominal wall; Femoral hernias; Inguinal canal; Direct and indirect inguinal hernia	1	
S2. Student presentations: Diaphragma pevis; Diaphragm urogenitale; Pelvis - walls; Ovary; Fallopian tube, tubal ligation	1	
S3. Student presentations: Uterus; Uterine fixation device; Ectopic pregnancy.	1	
S4. Student presentations: Testis, epididymis; Ductus deferens, vesiculae seminales, vasectomy; Varicocele, hydrocele; Funiculus spermaticus, lig. teres uteri; Prostate, bulbourethral glands; Prostate hypertrophy; Urethra (male and female)	1	
S5. Student presentations: A. iliaca interna – back trunk, branches; A. iliaca interna – anterior trunk, branches; A pudenda interna; Ischioanal fossa, anal triangle	1	
S6. Student presentations: Urinary bladder; Rectum; Veins of the pelvis (rectum); N. pudendus	1	
S1-3. Student presentations. Inguinal Canal and Inguinal Hernias. Uterus. Ectopic pregnancy. Ovarium & Tuba Uterina. Funiculus Spermaticus and Vasectomy. Prostata and Hypertrophy of prostate. Testis, Epididymis, Varicocela & Hydrocela. Urethra.	3	ONLINE

EXAM DATES (final exam):