

**UNIVERSITY OF SPLIT
SCHOOL OF MEDICINE
DEPARTMENT OF PATHOPHYSIOLOGY
MEDICAL STUDIES IN ENGLISH, 3rd YEAR**

PATHOPHYSIOLOGY – MEDICINE (2023./24.)

COURSE DESCRIPTION AND OBJECTIVES:

This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is on interrelationships among organ systems in deviation from homeostasis. Students examine the phenomena that produce alterations in human physiologic function and the resulting response.

Upon completion of the course, students will understand pathophysiological changes, including how pathological processes are manifested, progress in the body with primary and secondary effects.

CLASS ATTENDANCE AND ACTIVITY:

Students are required to attend all forms of teaching and **actively participate** in seminars and exercises, which will be graded (plus or minus). Three awarded activities at seminars and exercises are worth one point at exam.

Absenteeism is monitored through individual records of class attendance. Student may **reasonably** be absent **up to 20%** of the total fund of lectures, seminars and exercises.

Absences from lectures (>2), seminars (all) and exercises (all) have to be compensated through a colloquium at least 3 days before the exam.

OBLIGATORY LITERATURE:

1. Hammer GD, McPhee SJ. Pathophysiology of Disease: An Introduction to Clinical Medicine 7/E, 2014. (selected chapters), or 8/E, 2018.
2. Handouts of lectures, seminars and exercises.

ADDITIONAL LITERATURE:

1. McCance KL, Huether SE. Pathophysiology - the Biologic Basis for Disease in Adults and Children 8/E, 2018.

EXAM:

The exam is composed of the written test and oral exam that equally contribute to the final mark. Written test is consisted of two parts: 75 multiple-choice questions (one answer is correct; 75 points) and one problem-solving case (5 points). To pass the written test it is required to achieve at least 55% of correct answers. Oral exam consists of 5 questions that are pulled by the student from different sets of questions.

EXAM TERMS:

1.	19./20.02.2024.
2.	24.07.2024.
3.	29.08.2024.
4.	12.09.2024.

TEACHING STAFF:

1. Prof. Tina Tičinović Kurir, MD, PhD
2. Assoc. Prof. Joško Božić, MD, PhD
3. Assoc. Prof. Mladen Krnić, MD, PhD
4. Assist. Prof. Anteo Bradarić, MD, PhD
5. Assist. Prof. Marino Vilović, MD, PhD
6. Marko Kumrić, MD, PhD
7. Josip Vrdoljak, MD, PhD
8. Piero Marin Živković, MD, PhD
9. Josip Anđelo Borovac, MD, PhD
10. Maja Mizdrak, MD, PhD

I. LECTURES

LEC.	LECTURE TOPICS	PLACE	TEACHER
L1	Pathophysiology of energy metabolism	B104	Vilović
L2	Pathophysiology of immune system and rheumatic diseases	B104	Vilović
L3	Pathophysiology of atherosclerosis and lipid metabolism disorders	B100	Vilović
L4	Pathophysiology of arterial hypertension	A116	Božić
L5	Review of respiratory pathophysiology	A116	Božić
L6	Pathophysiology of hemodynamic shock	A116	Bradarić
L7	Pathophysiology of heart failure	A116	Bradarić
L8	Pathophysiology of diabetes mellitus and disorders of carbohydrate metabolism	A116	Tičinović Kurir
L9	Pathophysiology of endocrine system 1	A116	Krnić
L10	Pathophysiology of endocrine system 2	A116	Tičinović Kurir
L11	Endogenous bioactive substances in pathological processes	B104	Božić
L12	Fluid and electrolyte disorders	A116	Božić
L13	Pathophysiology of acid-base disorders	B100	Božić
L14	Pathophysiology of acute and chronic kidney failure	A116	Božić
L15	Integration	B104	Božić

II. SEMINARS

SEM.	SEMINAR TOPICS	PLACE	TEACHER
S1	Pathophysiology of infection and inflammation	B103	Vilović
S2	Pathophysiology of respiratory system	A117	Božić
S3	<i>Problem seminar:</i> Respiratory system disorders	B101	Božić
S4	Pathophysiology of cardiovascular system 1	B101	Kumrić
S5	Pathophysiology of cardiovascular system 2	A529	Kumrić
S6	<i>Problem seminar:</i> Cardiovascular disorders	S1 (A529) S2 (A530)	Kumrić
S7	Pathophysiology of blood 1	S1 (B102) S2 (B101)	Božić
S8	Pathophysiology of blood 2	S1 (B104) S2 (B101)	Kumrić
S9	Pathophysiology of thermoregulation	S1 (A530) S2 (A529)	Vilović
S10	<i>Problem seminar:</i> Blood disorders	S1 (B102) S2 (A104)	Božić
S11	Metabolic disorders	S1 (A101) S2 (B101)	Božić
S12	Pathophysiology of parathyroid gland and calcium	S1 (B102) S2 (A430)	Božić
S13	<i>Problem seminar:</i> Endocrine disorders	A117	Vilović
S14	Pathophysiology of gastrointestinal disorders	B104	Vrdoljak
S15	Pathophysiology of exocrine pancreas	B104	Vrdoljak
S16	Pathophysiology of hepatobiliary disorders	B102	Kumrić
S17	<i>Problem seminar:</i> Gastrointestinal and hepatobiliary disorders	A101	Vilović
S18	Pathophysiology of renal disorders	A429	Mizdrak
S19	Selected topics	A117	Božić
S20	<i>Problem seminar:</i> Renal disorders	B104	Božić

Križine 6th floor – University Hospital Split, Križine – Seminar Hall on 6th floor

III. PRACTICALS

PR.	PRACTICALS TOPIC	PLACE	TEACHER
P1	Orthostatic load and ECG in exercise	LCI	Kumrić/Božić
P2	Basics of ECG analysis	P1,P2 (A117) P3 (A101) P4, P5 (A104) P6 (A530) P7 (A429) P8 (A529)	Vilović
P3	CE - Patients with heart disorders	Clinic	Borovac
P4	ECG – from pathophysiology to practice	P1-P4 (B102) P5-P8 (B101)	Kumrić/Božić
P5	Blood disorders – clinical cases and laboratory tests	P1-P6 (A529) P7, P8 (A117)	Kumrić/Vrdoljak
P6	CE - Patients with endocrine disorders	Clinic	Krnić
P7	CE - Patients with gastrointestinal disorders	Clinic	Živković

P8	Acid base and electrolyte disorders - case studies	P1,P2,P5,P6 (A529) P3, P4 (B102) P7, P8 (B104)	Božić/Kumrić
P9	CE – Emergency medicine cases	Clinic	Tičinović Kurir
P10	CE - Patients with renal disorders	Clinic	Mizdrak
P11	Integration	B102	Božić/Kumrić

LCI- Laboratory for Cardiometabolic Investigations, 5th floor; **Clinic,** Department of Internal medicine (Hospital Firule or Križine, details will be provided)

Important: For all Clinical exercises students must have a white coat!

Contacts:

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For all schedule changes and additional announcements students are obligate to follow official web pages of Department of Pathophysiology at:

<http://www.mefst.unist.hr/education/courses/pathophysiology>