## MEDICAL STUDY IN ENGLISH

**SUBJECT: IMMUNOLOGY** 

Head of the department: Associate professor Ivan Ćavar, MD, Ph.D.

**Teachers:** Professor Drago Batinić, MD, Ph.D.; Associate professor Ivan Ćavar, MD, Ph.D.; Associate professor Vesna Lukinović-Škudar, MD, Ph.D.; Katarina Cvitković, MD, Ph.D.; Jelena Sulić, MD

## **IMPLEMENTATION PLAN FOR THE ACADEMIC YEAR 2021-2022**

Day	Time	Group	Theme (Chapter)	Lecturer
	14.00-15.30	All	(L) Innate and acquired immunity, types of acquired immunity, characteristics of	Drago Batinić
MON	15.45-17.15	All	acquired immune responses (Chapter 1) (L) Immune system cells and tissues, review of immune responses to microorganisms	Ivan Ćavar
30. 05.	17.30-19.00	All	<ul> <li>(Chapter 1)</li> <li>(L) Basic characteristics and specificity of innate immune responses, cellular receptors for microorganisms and damaged cells (Chapter 2)</li> </ul>	Ivan Ćavar
	14.00-15.30	All	(L) Components, reactions and role of innate immunity in stimulating acquired immune responses (Chapter 2)	Ivan Ćavar
TUE	15.45-17.15	All	(S) Antigens recognized by T lymphocytes, the way how APC collect protein antigens, structure and function of HLA/MHC molecules (Chapter 3)	Jelena Sulić
31. 05.	17.30-19.00	All	(L) Processing and presentation of protein antigens, other roles of APS and recognition of antigens by B lymphocytes (Chapter 3)	Ivan Ćavar
	14.00-15.30	All	(L) Cytokines and chemokines (Chapters 2 and 5)	Ivan Ćavar
WDS	15.45-17.15	All	(S) Antigenic lymphocyte receptors; Antibodies and T lymphocyte receptors (Chapter 4)	Jelena Sulić
01. 06.	17.30-19.00	All	(L) Development of immune repertoire; Lymphocyte development, emergence of diverse antigen receptors, maturation and selection of T and B lymphocytes (Chapter 4)	Ivan Ćavar
	14.00-15.30	All	(L) Phases of T lymphocyte response, antigen recognition and costimulation, biochemical pathways of T lymphocyte activation (Chapter 5)	Ivan Ćavar
THU	15.45-17.15	All	(S) Functional responses of T lymphocytes to antigen and costimulation and their migration in cellular immunity responses (Chapter 5)	Jelena Sulić
02. 06.	17.30-19.00	All	(L) Complement system (Chapter 2 and 8)	Ivan Ćavar
FRI	14.00-15.30	All	(P) Executive mechanisms of T lymphocyte-mediated immunity (Chapter 6)	Ivan Ćavar
03. 06.	15.45-17.15	All	(E) ELISA and immunofluorescence - computer simulation	Jelena Sulić
03.00.				

Day	Time	Group	Theme (Chapter)	Lecturer
MON 06. 06.	13.30-14.00 14.00-15.30 15.45-17.15 17.30-19.00	All All All	Repeat Test (for extra points on the test) (S) Phases and types of humoral immune responses, stimulation of lymphocytes B by antigen (Chapter 7) (S) Roles of helper T lymphocytes and antibodies in humoral immune responses (Chapter 7) (L) The executive mechanisms of humoral immunity (Chapter 8)	Vesna Lukinović- Škudar
TUE	14.00-15.30	All	(S) Immunological tolerance: significance and mechanisms; Central and peripheral tolerance mediated by T lymphocytes (Chapter 9) (L) Tolerance mediated by lymphocytes B; Tolerance of commensal microorganisms and fetal antigens; Autoimmunity (Chapter 9)	Vesna Lukinović-
07. 06.	15.45-17.15	All		Škudar
WDS	14.00-15.30	All	(S) Immune responses to tumors (Chapter 10) (L) Immune responses to transplants (Chapter 10)	Vesna Lukinović-
08. 06.	15.45-17.15	All		Škudar
THU	14.00-15.30	All	(S) Types of hypersensitivity reactions; Early hypersensitivity (Chapter 11) (L) Diseases caused by antibodies, immunocomplexes and T lymphocytes (Chapter 11)	Vesna Lukinović-
09. 06.	15.45-17.15	All		Škudar
FRI 10. 06.	13.30-14.00 14.00-15.30 15.45-17.15	All All All	Repeat Test (for extra points on the test) (E) Flow cytometry - computer simulation (L) Congenital and acquired immunodeficiencies	Ivan Ćavar Jelena Sulić Ivan Ćavar

L=Lecture, S=Seminar, E=Exercise

LITERATURE: Abul K. Abbas, Andrew H. Lichtman, Shiv Pillai. Basic immunology: functions and disorders of the immune system. 6th Edition, Elsevier, 2020. ISBN: 978-0-323-54943-1

## **Exams:**

1st term = FRIDAY, 17. 6. 2022., 9.00 h

Summer terms: Wednesday 6. 7. 2022., 9.00 h; Wednesday 20. 7. 2022., 9.00 h Autumn terms: Wednesday 14. 9. 2022., 12 h; Wednesday 28. 9. 2022., 12 h