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|  | | | **UNIVERSITY OF EAST SARAJEVO**  Faculty of Medicine | | | | | | | | | | |  | | |
| ***Study program:medicine*** | | | | | | | | | | |
| Integrated academic studies | | | | | | II study year | | | | |
| **Full subject title** | | | IMMUNOLOGY | | | | | | | | | | | | | |
| **Department** | | | Department of Propedeutics, Faculty of Medicine in Foca | | | | | | | | | | | | | |
| **Subject code** | | | | | | **Subject status** | | | | | **Semester** | | | **ECTS** | | |
|
| ME-01-1-015-4 | | | | | | compulsory | | | | | IV | | | 3 | | |
| **Professor/ -s** | | Full professor. Nebojsa Arsenijevic,MD PhD; full professor. Ivan Jovanovic, MD, PhD; assistant professor Ružica Lukić MD PhD, associate professor Aleksandar Arsenijevic, MD, PhD | | | | | | | | | | | | | | |
| **Associate/ -s** | |  | | | | | | | | | | | | | | |
| **Number of lectures/ teaching workload (per week)** | | | | | | | **Individual student workload (in hours per semester)** | | | | | | | | **Coefficient of student workload So[[1]](#footnote-1)** | |
| **L** | **E** | | | | **SP** | | **L** | | | **E** | | **SP** | | | **So** | |
| 1 | 2 | | | | 0 | | 1\*15\*1 | | | 2\*15\*1 | | 0\*15\*1 | | | 1 | |
| total teaching workload (in hours, per semester)  1\*15 + 2\*15 + 0\*15 = 45 | | | | | | | | total student workload (in hours, per semester)  1\*15\*1 + 2\*15\*1 + 0\*15\*1 = 45 | | | | | | | | |
| Total subject workload (teaching + student): 45 + 45 = 90 hours per semester | | | | | | | | | | | | | | | | |
| **Learning outcomes** | | Mastering the subject, the student will be able to:  1. describe the molecules responsible for specific antigen recognition and describe the process of activation of the lymphocytes and, at the molecular level, explain the differences between the terms of proliferation and differentiation  2. differentiate the forms of immune response to different infectious agents and describe the effector mechanisms of the immune response  3. learn the basic cytokines involved in regulation of the immune response, explain the concepts of immune tolerance, tumor immunology and immunology of transplantation  4. explain the mechanisms of autoimmune disease and immunodeficiency. | | | | | | | | | | | | | | |
| **Preconditions** | | Precondition for taking the exam: all year I exams passed | | | | | | | | | | | | | | |
| **Teaching methods** | | Lectures, exercises | | | | | | | | | | | | | | |
| **Subject content per week** | | **Lectures:**  1. Introduction to the immune system  2. Inborn immunity I  3. Inborn immunity II  4. Taking antigens and presenting the antigens to lymphocytes  5. Identification of antigen in acquired immunity  6. Cellular immune response  7. The effector mechanisms of cellular immunity I  8. The effector mechanisms of cellular immunity II  9. The humoral immune response  10. The effector mechanisms of humoral immunity I  11. The effector mechanisms of humoral immunity II  12. Immune tolerance and autoimmunity  13. The immune response to transplanted tissue  14. Hypersensitivity  15. Immunodeficiency  **Exercises:**  1. Introduction to the immune system  2. Inborn immunity I  3. Inborn immunity II  4. Download antigens and present the antigen to lymphocytes  5. Identification of antigen in acquired immunity  6. Cellular immune response  7. The effector mechanisms of cellular immunity I  8. The effector mechanisms of cellular immunity II  9. The humoral immune response  10. The effector mechanisms of humoral immunity I  11. The effector mechanisms of humoral immunity II  12. Immune tolerance and autoimmunity  13. The immune response to transplanted tissue  14. Hypersensitivity  15. Immunodeficiency | | | | | | | | | | | | | | |
| **Compulsory literature** | | | | | | | | | | | | | | | | |
| **Author/s** | | | | **Publication title, Publisher** | | | | | | | | | **Year** | | **Pages (from-to)** | |
| Abul K.Abbas,Andrew H.Lichtman,Shiv Pillai | | | | Basic Immunology.Elsevier, | | | | | | | | | 2019 | |  | |
|  | | | |  | | | | | | | | |  | |  | |
| **Additional literature** | | | | | | | | | | | | | | | | |
| **Author/s** | | | | **Publication title, Publisher** | | | | | | | | | **Year** | | **Pages (from-to)** | |
|  | | | |  | | | | | | | | |  | |  | |
|  | | | |  | | | | | | | | |  | |  | |
| **Student responsibilities, types of student assessment and grading** | | **Grading policy** | | | | | | | | | | | | **Points** | | **Percentage** |
| Pre-exam activities | | | | | | | | | | | | | | |
| lecture/exercise attendance | | | | | | | | | | | | 10 | | 10% |
| colloquium | | | | | | | | | | | | 30 | | 30% |
| Final exam | | | | | | | | | | | | | | |
| test | | | | | | | | | | | | 60 | | 60% |
|  | | | | | | | | | | | |  | |  |
|  | | TOTAL | | | | | | | | | | | | 100 | | 100% |
| **Certification date** | | December 13 th 2018. | | | | | | | | | | | | | | |

Responsible Person of the Faculty

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Coefficient of student workload So is calculated as it follows:

   а) for the study programs not going through the licensing process: So = (total workload in semester for all the subjects 900 hrs – total teaching workload L+E in semester for all the subjects 870 hrs)/ total teaching workload L+E in semester for all the subjects \_\_\_\_\_ hrs = \_\_\_\_. Consult form content and its explanation.

   b) for the study programs going through the licensing process, it is necessary to use form content and its explanation. [↑](#footnote-ref-1)