Immunology is a very important branch of the medical and biological sciences which studies the immune system. The course provides a sophisticated review of select basic immunology topics, with an emphasis on recent advances and issues that are relevant to the pathogenesis and treatment of immune-mediated diseases. The aim of this course is to introduce the recognition of antigen, its role and role of MHC, immune receptors and signaling pathways, molecular and cellular basis of the adaptive immune response, mechanisms of effector immune responses, cell-cell communication and the coordination of responses by multiple immune cell types, etc. The course will also allow to form an understanding of the biological significance and relationship of the studied cellular and molecular components of immunity. At the end of the course, an advanced theoretical and practical knowledge in the field of clinical immunology will be given to the students.