## **Principle Courses for PhD**

Code & Name	Contents
MIC - 2080 Advanced bacteriology and mycology	Biological characteristics of prokaryotes – bacterial form and structure – microbial genetics and conventional control of the genetic form – genetics in bacteria and gene expression – chromosome organization and performance – induction of bacterial disease – introduction into epidemiology and infectious diseases – microbe structure – growth and culture of bacteria – growth dynamics in fluid and solid media – relationship between bacteria and host – types of bacterial infection – pathway and spread of infectious bacteria and its virulence – bacterial diseases and vaccines – prions as a unique disease agent – introduction on mycology and their structure – mycotic metabolism – mycotic growth and division – genetic structure of fungi – classification of mycotic organisms –
<u>MIC - 2081</u> Advanced Immunology	mycotic diseases and mycotoxins – antimycotics.Molecules of immune recognition – genetic basis of antibody production – cytokines – the relationship between histocompatibility molecules and occurrence of disease – vaccine production using recent genetic techniques – immunology of (organ transfer –mucus membranes – fetus and parturition – tumors and immunotherapy of tumors- infectious diseases – immunodeficiency disorders- autoimmune diseases)