ماجستير احياء مجهرية بيطرية

علم الاحياء المجهرية العام	المخاطر البيولوجية
Introduction and History of Microbiology Bacterial Cell Structure and Function Bacterial Classification Bacterial Nutrition and Growth Sterilization and Disinfection Antibiotics and Chemotherapeutic Agents Bacterial Genetics , Bacterial Virulence Normal Flora and Probiotics Mycoplasma , Mycology Rickettsia and Chlamydia	Route of exposure to pathogens. Laboratory safety symbols and hazard signs. Risks groups and Biosafety Levels. Biosafety cabinet classes: Design, Operation, use and misuse. Standard Microbiology Techniques and Safety. Biological Materials (Bacteria, Viruses, Fungi, Parasites, Prions, Zoonotic pathogens, Toxins). Collection, handling and transport of diagnostic specimens. Decontamination and waste disposal. Working with potentially infected animals. General considerations. Biological accidents: - In the Laboratories. - In the field. First aid and emergency response in the Laboratories
علم الاحياء المجهرية الخاص	
Staphylococcus , Streptococcus Corynebacterium , Listeria , Bacillus , Clostridium , Actinomyces and Nocardia Actionbacillus ,Pasteurella , Haemophillus Moraxella and bordetlla Pseudomonas (Burkholderia) Leptospira , Campylobacter , Brucella , Spharophorus , Enterbacteriacae , Mycobacterium	
علم الفايروسات	
Introduction and Discovering of Viruses General Characteristics of Viruses, Nature and Structure Morphology and Chemistry of Viruses Virus Classification and Taxonomy Virus Multiplication and Propagation ((replication Viral genetics and Interaction Between Viruses Interferon and Viral Interference Viral Vaccines and Antiviral Drugs Bacteriophages Effect of Physical and Chemical Agents on Viruses Laboratory Diagnosis of Viral Infection Picornavirus and Caliciviridae Orthomyxoviridae Paramyxoviridae and Retroviridae Reoviridae and Birnaviridae Rhabdoviridiae and Bornaviridae Bunyaviridae and Coronaviridae Poxviridae, Herpesviridae Adenoviridae and Parvoviridae Papovaviridae and Papillomaviridae	**علم المناعة** Principle of immunity immune response specific and nonspecific Immunoglobulin: Structure, variation, Function and synthesis Immunology of T and B cells Complement: Nature, Function and pathways Cell mediated immunity antigen recognition by T cells Immunological tolerance Types of Hypersensitivity Mechanisms Auto-immunity Transplantation Principle of immune genetics Immunoanaphylaxis reaction Immunity of infection