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| **Course title** | **Code** | **Semester** | **Type of course** | **Course volume (Contact hours)** | **ECTS** |
| **Infectious Agents and Mechanisms, Immune Disorders** | **MED**  **2003** | **III** | **Mandatory** | **85** | **5** |
| **Faculty, the educational program and level of education** | * School of Medicine and Health Sciences * Higher Medical Educational Program “Medicine” * One cycle 6-year | | | | |

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| **Learning Course Content** |
| * **BIOCHEMISTRY** Disorders of Amino Acids Metabolism; Posttranslational Modification of Proteins and Targeting.Protein trafficking defects; Disorders of Protein Metabolism and Protein folding associated diseases.; Disorders of vitamin metabolism; Disorders of Protein Metabolism and Protein folding associated diseases; Biochemistry Lab: Protein SDS-PAGE Electrophoresis and evaluation of serum plasma protein patterns * **CL. MICROBIOLOGY** Mycobacterium. Bacillus-1, Bacillus-2; Listeria and Erysipelothrix.;"Corinobacterium and other Gram positive Rods. HTLV, Retrovirus; HIV-1; HIV-2. ; Opportunistic Fungi. Yeasts and Molds; Histoplasma, Coccidioides, Aspergillus, Mucor, Sporothrix.; "Lab:Diagnosis of Gram positive bacteria; Lab: Diagnosis of non-fermentative Gram negative bacilli" * **Clinical Skills** History taking; Interviewing, Questioning, taking notes (TSE) * **PATHOLOGY** General principles of microbial pathogenesis; Pathology of viral diseases. Pathology of bacterial infections. Pathology of fungal diseases; Pathology of parasitic diseases. Pathophysiology of sepsis. Tuberculoses.; Naming of neoplasia; Introduction to neoplasia; Epidemiology of cancer; Molecular basis of cancer; Neoplasia, general characteristics of benign and malign neoplasm; Invasion and metastasis; Cancerogenic agents. Clinical characteristics and staging of tumors; Pathology lab. * **Pathology IMMUNOLOGY** Host defenses to viruses; Host defenses to extracellular and intracellular bacteria, protozoa and helminth.; Primary Immunodeficiency; Secondary Immunodeficiency; Carcinogenic agents; Host response against tumor, tumor immunity; Immunotherapy of tumor. * **Pharmacology** Introduction to antimicrobial chemotherapeutics; Pharmacotherapy in bacterial infections: Beta-lactam antibiotics; Cell wall and membrane-active Antibiotics; Protein synthesis İnhibitors; Quinolones. Sulfonamides, Trimethoprim; Antifungal agents; Antiviral agents; Antimycobacteriel Drugs; Antiprotozoal Drugs; Antihelmintic Drugs.; Immunopharmacology * **Top Anatomy** Regio oralis -I: Cavum oris, Diaphragma oris;Regio oralis -I: Palatum (durum+molle), Tonsilla palatina ; Regio oralis -II: Lingua(intrinsic and extrinsic muscles;inervation,blood supple); Regio oralis -II: Larynx; Pharinx; Tongue; Cervix I: Regio colli (cervicalis) anterior - Trigonum Submandibulare, Trigonum submentale; ; Cervix I: Regio colli (cervicalis) anterior - Regio suprahyoidea, Regio infrahyoidea.; Cervix II: Regio colli (cervicalis) laterale - Trigonum caroticum, Trigonum omoclaviculare; Cervix II: Regio colli (cervicalis) laterale - Truncus cervicalis, vessels, nerves. ; Deep fascias of the neck |
| **Textbooks and Materials** |
| * Robbins Basic Pathology-Vinay Kumar; Abul K. Abbas; Elsevier; 10th. ed. 2018 * Elsevier's Integrated Pathology- King C. Thomas; Mosby Elsevier; 2007; * Cellular and Molecular Immunology- Abbas, K. Abul; Elsevier Sounders; 10th.ed. 2022. * Exploring Immunology Concepts and Evidence. Gordon MacPherson. Wiley Balkwel.1st ed 2012 * Clinically Oriented Anatomy- Moore, Keith L; Wolters Kluwer; 9th.ed. 2023; * Medical Microbiology- Murray, Patrick R; Rosenthal, Ken S; 9th ed. Elsevier Sounder; 2021. * Case Studies in Infectious Disease- Peter Lydyard; Garland Science; 2010; * Elsevier's Integrated Immunology and Microbiology- Actor Jeffrey K; Mosby Elsevier; 2007; * Basic & Clinical Pharmacology: A lange medical book- Katzung, Bertram G; Mc- Graw Hill Education.15th. ed; 2021. * Lippincott Illustrated Reviews: Pharmacology- Karen Whalen; Wolter Kluwer; South Asian ed. 2019; * Biochemistry: Lippincott's illustrated Reviews- Ferrier Denice R; Wolters Kluwer; 7th ed. 2017. * Color Atlas of Biochemistry-Jan Koolman; Klaus-Heinrich Roehm; Thieme; 3rd.ed. 2013; * Clinical skills- Nursing skills * clinical Nursing skills&techniques- Anne Griffin Perry, Patricia A. Potter; Elsevier Mosby;10th ed;2022 * Taylor’s Clinical Nursing Skills: a nursig process approoach-Pamela Lynn; Wolters Kluwer ;9th ed.; 2023. * Introduction to Pharmacology-Mary K.Asperheim;Justin Favaro; Elsevier Sounder. 12th.ed; 2012; * Essentials of Medical Pharmacology-KD Tripathi; Jaypee Brothers Medical Publishers; 5th ed. 2003; * Roitt’s Essential Immunology- Delves, Peter J; Martin,Seamus J; Wiley –Blackwell; 12th.ed. 2011; * Medical Microbiology: A guide to microbial infections:Pathogenesis, Immunity, Laboratory Diagnosis and Control- David Greenwood; Mike Barer; Churchill Livingstone; 18th.ed. 2012; * Clinical Immunology: Principles and Practice- Robert Rich; Thomas Fleisher; Elsevier Sounders; 4th.ed. 2013; |