



JALAL-ABAD INTERNATIONAL UNIVERSITY



DOING GOOD
CHARITY FOUNDATION

MERIT SCHOLARSHIP 2025

Syllabus 1st year

Physiology

- General Physiology, concepts of general physiology, cell membrane and transport proteins, and transport processes.
- Membrane potential, Excitation and action potential, Nerve, Muscles, sarcomere and smooth muscle.
- Introduction to respiratory system, mechanism of breathing, thoracic cage of its movements, pressure involved in breathing, surfactant, compliance, lung volume and capacities, dead space, pulmonary circulation, ventilation perfusion ratio, gas transport in blood.

ANATOMY SYLLABUS

1) INTRODUCTION TO ANATOMY

Anatomical terminology, planes, and body divisions.

2) OSTEOLOGY

• General Osteology

1) Classification of bones: Long, short, flat, irregular, and sesamoid bones.

2) Key Features of every bone in human body with Landmarks.

• Head and Neck

• Upper Limb

• Lower Limb

• Thorax and Vertebral Column

3) ARTHROLOGY

Types of Joints

Classification of Joints based on structure and function

Types of Synovial Joints and Components of a Joint

4) MYOLOGY

Study of muscles with a focus on structure, classification, and clinical relevance.

• Upper Limb

• Lower Limb

5) BRACHIAL PLEXUS AND NERVE SUPPLY TO UPPER ARM

Specific nerve innervation (e.g., Axillary, musculocutaneous, radial, ulnar and median nerve)

6) LUMBAR AND SACRAL PLEXUS

Specific nerve innervation (e.g., femoral, sciatic, and tibial nerves).

HISTOLOGY SYLLABUS

1) INTRODUCTION TO HISTOLOGY

2) MICROSCOPE

3) EPITHELIUM & ITS TYPES

4) CONNECTIVE TISSUES AND ITS TYPES

• BONES

• CARTILAGE

• BLOOD

5) GLANDS AND ITS TYPES

6) INTEGUMENTARY SYSTEM

• SKIN AND ITS LAYERS

• HAIR AND HAIR FOLLICLE

• NAIL ITS STRUCTURE AND HISTOLOGY

• CELL JUNCTIONS





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Syllabus 2nd Year

1. Pharmacology

- General pharmacology - Pharmacokinetics, pharmacodynamics, Pharmacogenetics, therapeutic drug monitoring, clinical trials, plasma concentration vs time graph, steady state, pharmacovigilance. Type of enzyme inhibitors. Drug antagonism. Details of enzymatic receptors.
- Cholinergic drugs, anti-cholinergic drugs, adrenergic drugs, anti-adrenergic drugs.

2. Complete anatomy

3. Microbiology

- Introduction to Microbiology
- Introduction to Bacteriology (bacterial anatomy, physiology, genetics)
- Sterilization & Disinfection
- Streptococcus
- Staphylococcus
- Neisseria
- Mycobacterium
- E Coli and Shigella
- Corynebacterium and Filamentous Bacteria
- C Diphtheria
- Nocardia and Actinomycetes
- Listeria Monocytogenes
- Spore Forming Bacteria
- Bacillus Anthracis
- Bacillus Cereus
- Clostridium Perfringens/Tetani/Botulinum
- Clostridium Difficile
- Parasitology

4. Pathology

cell injury, haemodynamic, immunity, neoplasia, RBC disorders, WBC disorder and platelets disorders. CVS pathology.

5. General physiology, Respiratory physiology, Muscle and physiology, Neurophysiology, Cvs physiology

6. Histology and embryology

7. Biochemistry - only vitamins and enzymes





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Syllabus 3rd year

1. Endocrinology

- Introduction
- Hypothalamus-Pituitary Axis.
- Diabetes insipidus
- Diabetes mellitus
- Hypothyroidism
- Hyperthyroidism
- Adrenal gland diseases

Respiratory medicine

- Interpretation of chest x-ray
- Introduction to respiratory disease and medicine
- Respiratory failure
- Pneumonia and management of pneumonia
- Lung tumours
- Bronchiectasis and cystic fibrosis
- ARDS
- Asthma, COPD and fungal infections of lung
- Pleural effusion
- Cor Pulmonale
- Obstructive sleep apnoea

2. Surgery - GIT

ESOPHAGUS

- 1) Congenital Diaphragmatic Hernia.
(Bochdalek, Morgagni Hernia)
- 2) Hiatus Hernia
- 3) Riding Ulcer/ Cameron's Ulcer
- 4) Stress Ulcers
- 5) Gastroesophageal Reflux Disease
- 6) Zenker's Diverticulum
- 7) Achalasia Cardia
- 8) Diffuse Esophageal Spasm
- 9) Nutcracker's Esophagus
- 10) Barrets's Esophagus
- 11) Carcinoma Esophagus
- 12) Leiomyoma
- 13) Plummer-Vinson Syndrome
- 14) Dysphagia Lusoria
- 15) Esophageal Perforation
- 16) Boerhaave Syndrome

STOMACH

- 1) Anatomy of Stomach
- 2) Peptic Ulcer
- 3) Gastrectomy
- 4) Dumping Syndrome
- 5) Upper GI bleeding
- 6) Mallory-Weiss Tear
- 7) Dieulafoy's Lesion
- 8) Carcinoma Stomach
- 9) Linitus Plastica
- 10) 8th AJCC TNM classification For Ca Stomach
- 11) Gastrointestinal stromal tumor(GIST)
- 12) Infantile Hypertrophic Pyloric Stenosis
- 13) Bezoars
- 14) Gastric Volvulus

PERITONEUM

- 1) Spontaneous Bacterial Peritonitis
- 2) Secondary Bacterial Peritonitis
- 3) Peritonitis in CAPD
- 4) Pelvic Abscess
- 5) Mesenteric Cyst
- 6) Pseudomyxoma Peritonei
- 7) Retroperitoneal Fibrosis

3. Complete Neurophysiology

4. Pathology - Cell injury, inflammation, haemodynamic, immunity, neoplasia, RBC disorders, WBC disorder and platelets disorders. CVS pathology.

5. Anatomy

6. Microbiology

7. Biochemistry

8. Physiology





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Syllabus 4th year

Complete subjects as per FMGE

Physiology

Paediatrics

ENT

Ophthalmology

Surgery

OBGY

Orthopaedics

Psychiatry

Forensic

Pathology





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All the Best!!

ELIGIBILITY CRITERIA

- 1**
Attendance should be more than 90%.
Students can do rework for missed classes to be eligible.
- 2**
Fees should be paid.
- 3**
Overall disciplinary behaviour of the candidate.

IMPORTANT DATES

PHASE -1

- 1. 1ST YEAR**
3RD MARCH 2025
- 2. 2ND YEAR**
27TH FEBRUARY
- 3. 1ST YEAR FEB BATCH**
27TH FEBRUARY
- 4. 3RD YEAR**
26TH FEBRUARY
- 5. 4TH YEAR**
25TH FEBRUARY



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