

BSHND 106: HUMAN ANATOMY AND HISTOLOGY

Course Learning Outcomes:

- To acquaint knowledge about structural components of body
- To know about histology and blood composition for the identification of diseases

Content - Theory:

1. Introduction

- Gross anatomy,
- Histology

2. Terminology

- Bones & joints, muscles, cartilage,
- Body structure, tissue, cell, organs

3. Digestive system

- Oral cavity,
- Stomach,
- Small & large intestine

4. Urinary system/ excretory

- Kidneys,
- Ureter,
- Bladder,
- Urethra

5. Cardio-vascular system

- Heart and Pericardium,
- Arteries system, venous system
- Major arteries & veins;

6. Respiratory system

- Upper respiratory- Pharynx, Larynx, Trachea sinuses;
- Lower respiratory- Bronchus, Lungs, Diaphragm;

7. Reproduction system:

- Male-Testis, Spermatic cord, Penis, Prostate, Bulbourethral gland/ other glands
- Female- Ovaries, Fallopian tubes, Uterus, Vagina, Vulva, Breast

8. Endocrinology

- Pituitary,
- Thyroid, Parathyroid,
- Thymus
- Adrenal, Renal, super renal

9. Lymphatic system

- Lymph,
- Lymph vessel,

- Lymph node;

10. Nervous system

- Brain,
- Spinal cord,
- Cranial nerves,
- Brachial plexus,
- Sciatic nerve;

11. Sensory organs

- Eyes,
- Ears,
- Taste buds,
- Smell,
- Touch.

12. Histology

- Microscopy & Histochemistry
- Cell biology
- Epithelia
- Connective Tissue
- Cartilage & Bone
- Blood
- Muscle
- Nervous system
- Circulatory System
- Lymphatic system
- Endocrine Organs
- Digestive tract – Oral Cavity
- Digestive tract – Oral Cavity, Esophagus
- Digestive tract – Esophagus, Stomach
- Digestive tract – Stomach, Intestines
- Digestive tract – Intestines, Liver, etc..
- Skin (Integument)
- Reproductive System – Male
- Reproductive System – Female

Content- Practical:

- Four primary tissues of body
- Epithelium tissues: Introduction, types, epithelial glands - endocrine & exocrine,
- connective tissues: loose connective tissue, collagenous, elastic and reticular fiber;
- Tissue of loose cartilage (fibroblast, fat cell, plasma cell, macrophages, mast cell);
- Blood: leukocytes, WBC, RBC & Platelets;

- Cartilage and its types; Muscle and its types;
- Histology in: GIT, respiratory, urinary systems, breast, uterus.
- Microscopy and preparation of histological slides.

Teaching-Learning Strategies:

Teaching will be a combination of class lectures, class discussions, and group work. Short videos/films will be shown on occasion.

Assignments:

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination:

Sessional Work: 25 marks

Midterm Exam: 35 marks

Final Exam: 40 marks

Recommended Readings:

1. Agur, A. M., & Dalley, A. F. (2009). Grant's atlas of anatomy. Lippincott Williams & Wilkins.
2. David, C. (2007). Anatomy of Hatha Yoga: A Manual for Students, Teachers and Practitioners. National Banarisdass Publishers (Pvt.) Ltd., New Delhi, India.
3. Tortora, G. J., & Petti, K. (2002). Principles of human anatomy. John Wiley & Sons.

