INTEGRAL UNIVERSITY, LUCKNOW

INTEGRAL INSTITUTE OF ALLIED HEALTH SCIENCES & RESEARCH

DEPARTMENT OF OCCUPATIONAL THERAPY

BACHELOR OF OCCUPATIONAL THERAPY (BOT)
SYLLABUS

YEAR/ SEMESTER: I/I

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT101**	**Title of the Course**	**HUMAN ANATOMY-I**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**I**	**3**	**1**	**0**	**4**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	The student will be able to demonstrate knowledge in human anatomy as needed for the study and practice of Occupational Therapy.						

Course Outcomes: After the successful course completion, learners will develop following attributes:	
CO1	To understand the level of organization of the human body & its application in practice of Occupational Therapy.
CO2	To understand the muscles, bones and joints of the various regions & its application in practice of Occupational Therapy.
CO3	To understand the level of organization of the human different system of the body & its application in practice of Occupational Therapy.
CO4	To understand the topographical and functional anatomy of the upper limb & its application in practice of Occupational Therapy.
CO5	To understand the topographical and functional anatomy of the lower limbs and its application in practice of Occupational Therapy.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	GENERAL ANATOMY	1. Introduction and subdivisions of Anatomy. 2. Anatomical nomenclature: Terms of Planes, Positions, Body parts and movements. 3. Basic tissues of the body: Definition, location and their function. 4. Structure and appendages of skin. 5. Superficial & deep fascia: Definition and functions, modifications of deep fascia.	8	CO1
2	OSTEOLOGY & ARTHRO LOGY	1. Define skeleton, classification of skeleton. 2. Bone: properties, function, types, structure, blood supply, ossification. Applied anatomy of bone. 3. Cartilage: types, characteristic and function. Applied anatomy of cartilage. 4. Arthrology: Joint, structure, function and classification. 5. Basic feature and classification of synovial joint. Applied anatomy of joint.	8	CO2
3	SYSTEMIC ANATOMY (Brief outline)	1. Myology: Classification of muscles and its characteristics features. Properties and structure of skeletal muscle. 2. Classification of skeletal muscle according to shape and fascicular architecture, action of muscles. 3. Fascia structure and function Applied anatomy of muscle and fascia. 4. CVS: Arteries, Capillaries, Veins, Heart, Lymphatic system. 5. Respiratory system: Anatomy of upper and lower respiratory tract including lungs, pleura, nose larynx, trachea. 6. Neurology: Anatomical and functional division of nervous system.	8	CO3
4	SUPERIOR EXTREMITY	1. Outline the anatomical features, attachments, ossification and side determination of the bones of upper limb. 2. Muscles of Scapular region and back their origin, insertion action and nerve supply. Details of Deltoid, Trapezius and latissimus dorsi. 3. Fascia and Muscles of front and back of upper arm, fore arm and hand: origin, insertion, nerve supply and action. 4. Joints of superior extremity: Shoulder girdle, Shoulder joint, Elbow, Wrist and joints of hand. 5. Nerves and blood vessels of Superior Extremity and their position course, relations &distribution. 6. Boundaries and contents of axilla and cubital fossa, details of Brachial plexus. 7. Applied anatomy of all structures of Superior Extremity.	8	CO4
5	INFERIOR EXTREMITY	1. Outline the anatomical features, attachments, ossification and side determination of the bones of upper limb. 2. Fascia and Muscles of front, back and medial thigh: origin, insertion, nerve supply and action. 3. Fascia and Muscles of Gluteal region: origin, insertion, nerve supply and action. 4. Fascia and Muscles of anterior, posterior and lateral compartment of leg: origin, insertion, nerve supply and action. 5. Fascia and Muscles of soles of foot: origin, insertion, nerve supply and action. 6. Joints of inferior extremity: Hip girdle, Hip joint, Knee, Ankle and joints of foots. 7. Arches of foot and its significance. Applied anatomy of all structures of inferior Extremity.	8	CO5

Reference Books:

1 B.D. Chaurasia's, Human Anatomy-Volume 1, 2, 3 CBS Publishers & Distributors.
2 Inderbir Singh, Textbook of Anatomy with Colour Atlas-Vol. 1, 2, 3 Jaypee Brothers.
3 Snell-Clinical Anatomy by regions -Lippincott.
4 McMinn's Last's Anatomy-Regional and applied, Churchill Livingstone.
5 Cunningham Manual of Practical Anatomy Vol. I, II, III, Churchill Livingstone.
6 Williams & Warwick, Gray's Anatomy-Churchill Livingstone.
7 Basic Anatomy & Physiology by Smout and McDowell

e-Learning Source:

1. https://youtu.be/X5RUFXZZBH4
2. https://youtu.be/06o_XNKwuOE
3. https://youtu.be/4Sab-2E4ZDI

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO / CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	1	2	-	-	-	1	2	1	2	2	1	2	-	3
CO2	2	3	2	2	-	-	-	1	3	1	3	2	2	1	-	2
CO3	1	3	1	2	-	-	-	1	2	-	2	2	1	2	-	3
CO4	2	3	1	2	-	-	-	1	3	-	3	2	2	3	-	3
CO5	1	3	1	2	-	-	-	1	2	1	2	2	1	2	-	3

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
BOT101	HUMAN ANATOMY-I	√	√	√			√	√	3,4

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT102**	**Title of the Course**	**HUMAN PHYSIOLOGY-I**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**I**	**3**	**1**	**0**	**4**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	The student will be able to demonstrate knowledge in human physiology as needed for the study and practice of Occupational Therapy.						

Course Outcomes	
CO1	To understand about general physiology& its application in practice of Occupational Therapy.
CO2	To understand the nerve, muscle physiology& its application in practice of Occupational Therapy.
CO3	To understand about basics of hematology& its application in practice of Occupational Therapy.
CO4	To understand about respiratory system & its application in practice of Occupational Therapy.
CO5	To understand about cardiovascular system and its application in practice of Occupational Therapy.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	GENERAL PHYSIOLOGY	1. The cell & cell organelles – structure & functions. 2. Homeostasis, biofeedback mechanisms. 3. Transport across cell membrane. 4. Outline of membrane potential & action potential.	8	CO1
2	NERVE PHYSIOLOGY& MUSCLES PHYSIOLOGY	1. Structure properties and classification of nerve and types of nerve fiber. 2. Resting Membrane Potential Action potential, Propagation of nerve impulse, Degeneration and regeneration of nerve. 3. Muscle –classification, structure, sarcomere & properties of muscles, Myoneural junction & transmission. 4. Molecular basis of muscle contraction Motor unit, EMG. 5. 5. Difference between smooth, skeletal and cardiac, Applied physiology – Myasthenia gravis, Rigor mortis, Reaction of degeneration, Muscle disorders.	8	CO2
3	HAEMATO LOGY	1. Composition and functions of blood. 2. Red blood cell – morphology, formation, normal count, functions, physiological and pathological Variation. 3. White blood cell – morphology, classification, properties, functions, physiological & pathological variation. 4. Hemoglobin – basic chemistry, fate and functions, Immunity – definition, classification, concept of antigen & antibody. 5. Homeostasis – steps, role of platelets, Blood groups – A,B,O, AB and Rh system, Anemias, ESR & PCV. 6. Plasma proteins, Anticoagulants, Blood transfusion, Applied aspects of hematology.	8	CO3
4	RESPIRATION	1. General organization of respiratory system, Mechanics of respiration – Inspiratory and expiratory. 2. Muscles, intra-pleural pressure, lung & thoracic, Compliance, surfactant, lung volumes & capacities. 3. Diffusion of gases, Transport of respiratory gases, Regulation of respiration, Outline of hypoxia (types & physiological changes). 4. Acclimatization to high altitude, Dead space, Ventilation/ perfusion ratio. 5. Maximum breathing capacity & breathing reserve, pulmonary function tests, Artificial respiration. 6. Asphyxia, cyanosis (types and physiological changes).	8	CO4
5	CARDIOVASCULAR SYSTEM & EXERCISE PHYSIOLOGY	1. General organization and properties of cardiac muscle, Origin and conduction of cardiac impulse, cardiac cycle and heart sounds. 2. Normal heart rate, bradycardia, tachycardia, Normal ECG, Cardiac output- normal values, physiological variations, Factors affecting cardiac out- put and regulation. 3. Blood pressure – normal values, measurement, determinants, short term and long term regulation 4. Regional circulation- Coronary, muscular, cerebral, Functions of Lymph, Pressure and volume changes during cardiac cycle. 1. **5.** Patho-physiology of circulatory shock and edema, Effects of exercise training, Hyper/Hypotension, Hemodynamic.	8	CO5

Reference Books:

1. Concise Medical Physiology by Chaudhuri, 4th Edition; New Central Book Agency.
2. Human Physiology, Sembulingam; 4th ed, Jaypee Brothers.
3. A Textbook of Practical Physiology, Ghai C L, Jaypee Brothers.
4. Practical physiology by Vijaya Joshi; Vora Medical Publication.
5. Human Physiology, Chatterjee. Vol: 1&2; 10th Edition; Medical & Allied Agency
6. Textbook of Medical Physiology by Guyton & Hall, 11th Edition; Elsevier Publication
7. Principles of Anatomy & Physiology, Tortora, 8th Edition; Harper & Row Publication
8. Textbook of Physiology : Ganong

e-Learning Source:

1. https://youtu.be/JuhDx9hQAx8
2. https://youtu.be/Ta_vWUsrjho
3. https://youtu.be/h1qSFZ9aw94
4. https://youtu.be/uYm4l_alVV0
5. https://youtu.be/VWamhZ8vTL4

	Course Articulation Matrix: (Mapping of COs with POs and PSOs)																
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	1	3	1	2	-	-	-	1	2	-	2	2	1	-	1	-	1
CO2	1	3	1	3	-	-	-	1	3	-	3	3	2	-	2	-	1
CO3	1	3	1	2	-	-	-	1	2	-	2	3	1	-	1	-	1
CO4	1	3	1	2	-	-	-	1	3	-	3	2	1	-	1	-	1
CO5	1	3	1	2	-	-	-	1	2	-	2	2	1	-	1	-	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
BOT102	HUMAN PHYSIOLOGY-I	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	

		√	√	√	√		√	√	3,4

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT103**	**Title of the Course**	**BIOCHEMISTRY**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**I**	**3**	**1**	**0**	**4**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	The student will be able to demonstrate knowledge in clinical as needed for the study and practice of Occupational Therapy.						

Course Outcomes: After the successful course completion, learners will develop following attributes:	
CO1	To understand about carbohydrate & its application in therapeutic exercises and rehabilitation of sport injury.
CO2	To understand about protein & its application in practice of Occupational Therapy during rehab of various disease, trauma and fitness training.
CO3	To understand about lipid and nuclic acid& its application in practice of Occupational Therapyduring rehab of various disease, trauma and fitness training.
CO4	To understand about vitamin and enzyme and hormones & its application in practice of Occupational Therapy during rehab of various disease, trauma and fitness training.
CO5	To understand about Nutrition and its application in practice of Occupational Therapy during rehab of various disease, trauma and fitness training.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	CARBO HYDRATE	1. Chemistry, Definition, Classification with Examples and Functions of Glycolysis. 2. Chemistry, Definition, Classification with Examples and Functions of TCA cycle. 3. Glycogen metabolism, Glycogen storage disorder, Diabetes Mellitus and glycosuria. 4. Hormonal regulation of blood glucose, HbA1C and GTT.	8	CO1
2	PROTEIN	1. Chemistry-definition-function-classification of Amino acids-protein structure 2. Effect of temperature on proteins- denaturation-coagulation; isoelectric pH & its importance 3. Metabolism-Digestion and absorption Decarboxylation- De-amination 4. Trans methylation transamination & their importance-Detoxification of ammonia including urea cycle 5. Clinical biochemistry: Relevance of blood levels of, urea, & uric acid, Protein in urine.	8	CO2
3	LIPIDS AND NUCLIC ACID	1. Chemistry-definition-classification-[including fatty acids with examples]-function 2. Metabolism-Digestion and absorption of lipids—β oxidation of saturated fatty acids and its energetics and regulation of fat metabolism in adipose tissue Ketone bodies formation & utilization—cholesterol and its importance [no biosynthesis needed]- classification, sources & function of lipoproteins lipoproteinemia atherosclerosis 3. Clinical Biochemistry - Lipid profile-Tri - glyceride, cholesterol/HDL/LDL/VLDL etc, Liver function test & Renal function test. 4. DNA/RNA definition-structure and function types-Genetic code-catabolism of purine –gout.	8	CO3
4	VITAMINS & ENZYMES & HORMONES	1. Definition, classification, functions dietary sources, daily requirement & Deficiency disorders. 2. Definition, Classification of enzymes, properties, mechanism of action, Clinical importance & regulation of activity 3. Introduction Definition & Classification of hormones. 4. Mechanism of hormone action, Effects of hormones on various metabolism & hormonal disorders.	8	CO4
5	NUTRITION & SPECIAL TOPICS	1. Introduction of Nutrition, Nutrients of their role in human 2. Nutritional requirements, Balance diet, Nutritional disorder, SDA (special dynamic action) 3. Respiratory quotient (RQ) & Basal Metabolism rate (BMR) 4. Water electrolyte balance & acid base balance.	8	CO5

Reference Books:

1. Fundamentals of Biochemistry-by Dr. Deb Jyoti Das,
2. Essentials of Bio-chemistry by U. Satyanarayan, 1st Edition, Books and Allied Publications.
3. Textbook of Biochemistry –Chatterje and Shinde
4. Text book of Medical Bio-Chemistry – Dr. M.N.Chettergee, 5th Edition, Jaypee Publication.
5. Fundamental of Bio-Chemistry –.Dr. A. C. Deb, 5th Edition, Central Publication.
6. Bio-Chemistry introduction – Mekee, 2nd Edition, McGraw-Hill Publication.

e-Learning Source:

1. https://youtu.be/t5DvF5OVr1Y
2. https://youtu.be/gggC9vctvBQ
3. https://youtu.be/ufvZ8bYtyO8
4. https://youtu.be/Q6R4o-oECxs

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	2	2	-	-	-	1	2	1	2	2	1	-	1	-
CO2	1	3	1	3	-	-	-	2	3	-	3	3	2	-	2	-
CO3	1	3	1	2	-	-	-	1	2	2	2	3	1	-	1	-
CO4	1	3	1	2	-	-	-	1	3	-	3	2	1	-	1	-
CO5	1	3	1	2	-	-	-	1	2	1	2	2	1	-	1	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
BOT103	BIOCHEMISTRY	√	√	√	√		√	√	3,4

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT104**	**Title of the Course**	**Fundamentals of Occupational-I**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**I**	**3**	**1**	**0**	**4**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	The student will be able to demonstrate knowledge in basic of Exercisetherapy as needed for the study and practice of Occupational Therapy.						

Course Outcomes	
CO1	To understand basic history of the of Occupational Therapy, To understand the history to established the profession.
CO2	To understand the importance of the history and philosophical base of the profession of occupational therapy.
CO3	To apply the occupational therapy foundations and concepts in assessment and interventional various occupational practice settings and across lifespan within a broad continuum of care
CO4	To evaluate and assess occupation and its determinants as well as use occupation as a means to improve health and well-being of communities.
CO5	To create the use meaningful activities in promotion of health & lessen disabilities.

Unit No.	**Title of the Unit**	**Content of Unit**	**Contact Hrs.**	**Mapped CO**
1	History and Scope of OT	1) History: Development of OT during world War; arts and crafts movement; moral treatment; 2) Scope: a) Definition of Occupational Therapy and its scope in rehabilitation Definition of rehabilitation Philosophy of rehabilitation with reference to principles of physical medicine. b) Team interaction models: Rehabilitation team and the role of different team members. Intra disciplinary, interdisciplinary and multidisciplinary models of interaction	6	CO1
2	Occupational Science	Theory of Occupation and Occupational Science: Definition of Occupation, Forms of Occupation, Occupation as an evolutionary trait, Biological, social, psychological dimensions of Occupation. Introduction to Occupational science, Linkage between Occupational science and Occupational Therapy	6	CO2
3	Principles and methods of Assessment	1) Joint Range of Motion- Upper Limb, Lower Limb, Spine & TM joints): Principles and procedures in joint measurement. Definitions of terms in joint measurement. Methods of joint measurements. Functional ROM Total Active motion Indications and contraindications of recording. 2) Muscle Strength: Definition of muscle Power and strength Principles of muscle testing Indications & contraindic ations of muscle testing. Gross muscle testing in normal and clinical conditions. (muscles of upper extremity & l ower extremity) Precautions in manual muscle testing 3) Muscle Tone: Definition of tone. Normal Muscle tone Abnormal Muscle tone Muscle tone assessment-Modified Ashworth Scale/Pearsons rating of mild, moderate severe spasticity.	10	CO3
	Assessment and diagnostic tools in OT	1) Coordination: Definition Characteristics of coordinated movements Inco-ordination, Cerebellar signs, Extra pyra midal signs Assessment of co-ordination 5) Sensation: Definition. Classification of sensations. Techniques and methods of Sensory evaluation. Specific sensory testing 2) Perception: Definition. Components and description of each component. Assessment methods 3) Cognition: Definition. Evaluation of cognitive Skills: Attention, Orientation, Memory (Immediate, Short term and long-term Memory), problem solving and Executive functions. 4) Endurance: Definition. Importance of Endurance in performance. Factors affecting endurance. Relation to activity tolerance. 5) Hand Functions & Evaluation Methods: Types of Hand functions- Prehension Grasp patterns Grip Pinch. In hand manipulation. Theoretical aspects of Assessment. Total active motion. Functional evaluation of hand. Edema assessment methods	10	CO4
5	ADL and Return to Work	Activities of Daily Living: 1. Evaluation &Gradation of Activities of daily living (ADL): Definition & classification of ADL. (BADL & IADL) Levels of assistance: [dependent to independent] 2. Introduction and application of ADL scales: Theoretical understanding of standardized ADL scales, components and application of Functional Independence Measure (FIM) Functional Assessment Measure (FAM) Assessment of Motor and Process Skills (AMPS) Modified Barthel Index Spinal Cord Independence Measure (SCIM).	8	CO5

Reference Books:

1. Helen S. Willard (Editor), Clare S. Spackman (Editor), H.L. Hopkins H.D. Smith (1993), Willard & Speckman Occupational Therapy, 8th edition, Lippincott Williams and Wilkins; USA, 976 pages.
2. Turner, Ann; Foster, Margaret, (1992), Occupational Therapy and Physical Dysfunction: Principles, Skills and Practice, Third Edition, Churchill Livingstone Publications, UK
3. Lorraine Williams Pedretti, (1996) Occupational Therapy: Practice Skills for Physical Dysfunction, 4th edition, Mosby Publications, UK, 896 pages
4. GARDINER M.D. (2005), THE PRINCIPLES OF EXERCISE THERAPY DENA GARDINER, 4TH EDITION, Ss venture Publications
5. Catherine Anne Trombly ,1983, Occupational therapy for physical dysfunction, 2nd edition, Williams & Wilkins; (January 1, 1983), USA, 512 pages
6. Carolyn Kisner PT MS, Lynn Allen Colby PT MS , John Borstad PT PhD , Therapeutic Exercise: Foundations and Techniques (Therapeutic Exercise: Foundations and Techniques) Seventh Edition.

e-Learning Source:

1. https://youtu.be/P_RQuRzp7SE
2. https://youtu.be/G7UccfwRywY
3. https://youtu.be/dNnTubgY2gs
4. https://youtu.be/7OkyTUZelpw

	Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	2	2	-	-	-	1	2	-	2	3	1	2	3	-
CO2	1	3	1	3	-	-	-	2	3	-	3	3	-	1	2	-
CO3	1	3	1	2	-	-	-	1	2	-	2	2	2	1	2	2
CO4	1	3	1	2	-	-	-	1	3	1	3	2	3	1	3	2
CO5	1	3	1	2	-	-	-	1	2	2	2	3	1	2	2	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	**Course Title**	**Attributes**							**SDGs No.**
BOT104	FUNDAMENTALS OF OCCUPATIONAL-I	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√	√		√	√	**3,4**

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**CS107**	**Title of the Course**	**COMPUTER APPLICATION IN OCCUPATIONAL THERAPY**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**I**	**2**	**1**	**0**	**3**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	The main objective of the course is to provide fundamental knowledge of computers, windows, MS word, and Power point						

Course Outcomes	
CO1	After studying this course, the students will know –The fundamentals of computers and computer systems.
CO2	After studying this course, the students will know –Understanding the basic concepts of DOS commands.
CO3	After studying this course, the students will know –A Basic understanding of the windows.
CO4	After studying this course, the students will know –Understanding MS Word.
CO5	After studying this course, the students will know –Knowledge, understanding, and basic concepts of presentation software.

Unit No.	**Title of the Unit**	**Content of Unit**	**Contact Hrs.**	**Mapped CO**
1	COMPUTER FUNDAMENTALS	What is a computer? Components of a computer system. Classification of computers. Types of computers. A brief history of the evolution of computers and generation of computers. Computer hardware and software. Input/ Output devices.	6	CO1
2	DOS	Elementary knowledge of DOS commands DIR, CLS, DATE, TIME, MD, CD, RD, RENAM, DEL, BACKUP, RESTORE, COPY, SCANDISK, CHKDSK.	5	CO2
3	WINDOWS	Difference between windows and DOS. Basic Features - Date, Time, Time Zone, Display, Screen Saver, Fonts, Mouse, and mouse pointers. Using accessories such as a calculator, paintbrush, CD player, etc. Use of Windows Explorer for moving and copying files. Introduction to MS Office and its integrated nature.	6	CO3
4	MS-WORD	Starting Word, new documents, entering text, changing text, aligning, underlining, and justifying text. Use of tabs. Tables - creation, adding rows and columns, splitting, and combining cells, Borders. Saving, closing, and operating documents. Adding headers and footers. Print preview, and print a document. Mail merge: creating main document and data source. Adding and removing fields from the data source.	6	CO4
5	POWERPOINT (PRESENTATION SOFTWARE)	The basic concept of presentation software. Standard, Formatting, and drawing toolbars in PowerPoint and their use. Creating and opening a presentation. Creating, deleting, opening, and copying slides. Closing and saving a presentation. Use of slide sorter, adding header/footer. Use of master slides and color box. Use of animation features. Inserting pictures, resizing pictures. Inserting organization chart. Use of auto content wizard.	6	CO5

Reference Books:

1. A First Course in Computers: Saxena, Vikas Publishing House
2. Fundamentals of Computer science - M. Afshar Alam
3. Fundamental of Information Technology by D. S. Yadav- New age International

e-Learning Source:

1. https://youtu.be/ME_F9yypzsw
2. https://youtu.be/FZqKyhfD7-E
3. https://youtu.be/S4Zio60b8P8
4. https://youtu.be/eEo_aacpwCw

	Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	2	2	2	-	-	-	1	2	1	2	-	2	2	1	-
CO2	1	-	1	3	-	-	-	2	3	-	3	-	1	1	1	-
CO3	1	3	1	2	-	-	-	1	2	2	2	-	1	1	1	-
CO4	1	2	1	2	-	-	-	1	3	-	3	-	1	2	1	-
CO5	1	2	1	2	-	-	-	1	2	1	2	-	1	1	1	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	**Course Title**	**Attributes**						**SDGs No.**
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
CS107	Computer Application in Occupational Therapy			√					**3,4, 11**

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**LN101**	**Title of the Course**	**BASICS OF PROFESSIONAL COMMUNICATION**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**I**	**2**	**1**	**0**	**3**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	The major objective of the course is to develop professional communication skills among the students.						

Course Outcomes	
CO1	After studying this course, the students will know –The meaning & importance of professional communication as well as effective professional communication.
CO2	After studying this course, the students will know –Understanding the language through literature like essays and short stories.
CO3	After studying this course, the students will know –Basic concepts and knowledge of vocabulary.
CO4	After studying this course, the students will know –Understanding and practice of basic grammar.
CO5	After studying this course, the students will know –Knowledge, understanding, and skills in report writing & business letter writing.

Unit No.	**Title of the Unit**	**Content of Unit**	**Contact Hrs.**	**Mapped CO**
1	PROFESSIONAL COMMUNICATION	a. Professional Communication: Meaning & importance b. Essentials of Effective Communication c. Barriers to Effective Communication	6	CO1
2	LANGUAGE THROUGH LITERATURE	a. Essays: "The Effect of the Scientific Temper on Man" by Bertrand Russell "The Aims of Science and Humanities" by Moody E. Prior b. Short Stories: "The Meeting Pool" by Ruskin Bond "The Portrait of a Lady" by Khushwant Singh	5	CO2
3	BASIC VOCABULARY	a. Euphemism, One-word Substitution, Synonyms, Antonyms b. Homophones, Idioms and Phrases, Common mistakes c. Confusable words and expressions	6	CO3
4	BASIC GRAMMAR	a. Articles, Prepositions, Tenses b. Concord (Subject-Verb agreement), Verbs: kinds & uses c. Degrees of Comparison	6	CO4
5	BASIC COMPOSITION	a. Report writing: What is a report? Kinds and objectives of reports, writing reports b. Business Letter Writing: Introduction to business letters, types of business letters, Layout of business letters, Letter of Enquiry / Complaint	6	CO5

Reference Books:

1. Lata, Pushp& Kumar, Sanjay. Communication Skills, Oxford University Press-2012
2. Quintanilla, Kelly M. & Wahl, Shawn T. Business and Professional Communication, Sage Publications India Pvt. Ltd-2011
3. Juneja, Om P & Mujumdar, Aarati.Business Communication: Techniques and Methods, Orient Black Swan-2010
4. Arora, V. N. & Chandra, Lakshmi. Improve Your Writing: From Comprehensive to Effective Writing, Oxford University Press-2010 (For the prescribed essays- "The Effect of the Scientific Temper on Man" by Bertrand Russell & "The Aims of Science and Humanities" by Moody E. Prior)

e-Learning Source:

1. https://www.youtube.com/watch?v=jQx_jZxdCbs
2. https://www.sciencedirect.com/topics/psychology/linguistictheory#:~:text=Linguistic%20Theory%20was%20formed%20by,to%20all%20typically%20developing%20humans
3. https://linguistics.ucla.edu/undergraduate/what-is-linguistics/
4. https://www.thoughtco.com/noam-chomsky-4769113

	Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	-	-	-	-	2	-	2	-	-	2	-	-	-	-	-
CO2	-	-	-	-	-	2	-	-	-	-	2	-	-	-	-	-
CO3	-	-	-	-	-	2	-	1	-	1	2	-	-	-	-	-
CO4	-	-	-	-	-	2	2	-	-	-	2	-	-	-	-	-
CO5	-	-	-	-	-	2	1	1	-	-	2	-	-	-	1	1

2- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	**Course Title**	**Attributes**							**SDGs No.**
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
LN101	BASICS OF PROFESSIONAL COMMUNICATION			√					**3,4, 11**

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT105**	**Title of the Course**	**HUMAN ANATOMY-I LAB**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**I**	**0**	**0**	**2**	**1**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	The student will be able to demonstrate knowledge in human anatomy as needed for the study and practice of Occupational Therapy.						

Course Outcomes	
CO1	To identify anatomical aspect of the level of organization of the human body practically & its application in practice of Occupational Therapy.
CO2	To identify anatomical and functional aspect of muscles, bones and joints of the various regions practically& its application in practice of Occupational Therapy.
CO3	To identify and practically apply various terms related to human different system of the body & its application in practice of Occupational Therapy.
CO4	To identify anatomical and functional aspect of neuromusculoskeletal structure of superior extremity& its application in practice of Occupational Therapy.
CO5	To identify anatomical and functional aspect of neuromusculoskeletal structure of inferior extremity & its application in practice of Occupational Therapy.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	GENERAL ANATOMY	1. Practical demonstration of human body on model with using different anatomical terms. 2. Demonstration of Anatomical position and movement of joint with anatomical terms. 3. Practical demonstration of various type of tissue and their location on human body. 4. Practical demonstration of skin and fascia.	4	CO1
2	OSTEOLOGY & ARTHROLOGY	1. Practical demonstration and classification of axial and appendicular skeleton on model. Identification and orientation of bones and joints in an articulated skeleton. 2. Demonstration of types of bone on models. 3. Practical demonstration of various type of cartilage on models. 4. Practical demonstration of various type of joint and their function on human models. 5. Practical demonstration of movement of various type of synovial joint on human body.	4	CO2
3	SYSTEMIC ANATOMY	1. Demonstrate different terms related to skeletal muscles on human body. 2. Demonstrate different shape of skeletal muscle and action of different group of muscle on human body. 3. Demonstrate location of fascia and fascial line on human body.	4	CO3
4	SYSTEMIC ANATOMY	1. Practical demonstration and identification, side determination, parts, and different bony. land marks and its attachment on non-articular bones of superior extremity. 2. Visual estimation and palpation of different vascular and Neuromusculoskeletal structure of superior extremity on human body. 3. Practical demonstration of action of different muscle of superior extremity. 4. Visual estimation and palpation of the joint line and structure around the joints. 5. Demonstration of Radio imaging anatomy of superior extremity.	4	CO4
5	INFERIOR EXTREMITY	1. Practical demonstration and identification, side determination, parts, and different bony. land marks and its attachment on non-articular bones of inferior extremity. 2. Visual estimation and palpation of different vascular and neuro musculoskeletal structure. of inferior extremity on human body. 3. Practical demonstration of action of different muscle of inferior extremity. 4. Visual estimation and palpation of the joint line and structure around the inferior extremity joints. 5. Demonstration of Radio imaging anatomy of inferior extremity.	4	CO5

Reference Books:

1 B.D. Chaurasia's, Human Anatomy-Volume 1, 2, 3 CBS Publishers & Distributors.
2 Inderbir Singh, Textbook of Anatomy with Colour Atlas-Vol. 1, 2, 3 Jaypee Brothers.
3 Snell-Clinical Anatomy by regions -Lippincott.
4 McMinn's Last's Anatomy-Regional and applied, Churchill Livingstone.
5 Cunningham Manual of Practical Anatomy Vol. I, II, III, Churchill Livingstone.
6 Williams & Warwick, Gray's Anatomy-Churchill Livingstone.
7 Basic Anatomy & Physiology by Smout and McDowell

e-Learning Source:

4. https://youtu.be/X5RUFXZZBH4
5. https://youtu.be/06o_XNKwuOE
6. https://youtu.be/4Sab-2E4ZDI

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO / CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	1	2	-	-	-	1	2	1	-	-	1	2	-	3
CO2	2	3	2	2	-	-	-	1	3	1	-	-	2	1	-	2
CO3	1	3	1	2	-	-	-	1	2	-	-	-	1	2	-	3
CO4	2	3	1	2	-	-	-	1	3	-	-	-	2	3	-	3
CO5	1	3	1	2	-	-	-	1	2	1	-	-	1	2	-	3

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
BOT105	HUMAN ANATOMY-I LAB	√	√	√	√		√	√	**3,4**

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT106**	**Title of the Course**	**HUMAN PHYSIOLOGY-I LAB**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**I**	**0**	**0**	**2**	**1**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	The student will be able to demonstrate the practical knowledge in human anatomy as needed for the study and practice of Occupational Therapy.						

Course Outcomes	
CO1	To understand about general physiology& its application in practice of Occupational Therapy.
CO2	To understand the nerve, muscle physiology& its application in practice of Occupational Therapy.
CO3	To understand about basics of hematology& its application in practice of Occupational Therapy.
CO4	To understand about respiratory system & its application in practice of Occupational Therapy.
CO5	To understand about cardiovascular system and its application in practice of Occupational Therapy.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	GENERAL PHYSIOLOGY	1. Learning through chart and models	4	CO1
2	NERVE PHYSIOLOGY & MUSCLES PHYSIOLOGY	1. NCV 2. Skeletal muscle-properties-pre / after Load-Fatigue-Starling's law 3. Cardiac muscle-properties-effect of Ach &Adrenaline 4. Ergography	4	CO2
3	BLOODS	1. Hb, RBC 2. WBC, Blood Groups 3. BT, CT	4	CO3
4	RESPIRATION	1. Spirometry 2. Lungs volume 3. Timed vital capacity 4. Respiratory sounds	4	CO4
5	CARDIOVASCULAR SYSTEM & EXERCISE PHYSIOLOGY	1. Blood Pressure – Effects of change in posture & exercise 2. Examination of Pulse 3. Heart sound 4. ECG	4	CO5

Reference Books:

1. Concise Medical Physiology by Chaudhuri, 4th Edition; New Central Book Agency.
2. Human Physiology, Sembulingam; 4th ed, Jaypee Brothers.
3. A Textbook of Practical Physiology, Ghai C L, Jaypee Brothers.
4. Practical physiology by Vijaya Joshi; Vora Medical Publication.
5. Human Physiology, Chatterjee. Vol: 1&2; 10th Edition; Medical & Allied Agency
6. Textbook of Medical Physiology by Guyton & Hall, 11th Edition; Elsevier Publication
7. Samson Wright's Applied Physiology 13th ed, Keele CA, Neil E &Joels N, Oxford Medical Pub.
8. Principles of Anatomy & Physiology, Tortora, 8th Edition; Harper & Row Publication.
9. Textbook of Physiology : Ganong

e-Learning Source:

1. https://youtu.be/X5RUFXZZBH4
2. https://youtu.be/06o_XNKwuOE
3. https://youtu.be/4Sab-2E4ZDI
4. https://youtu.be/uYm4l_alVV0
5. https://youtu.be/VWamhZ8vTL4

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	1	2	-	-	-	1	2	-	2	-	1	-	1	-
CO2	1	3	1	3	-	-	-	1	3	-	3	-	2	-	2	-
CO3	1	3	1	2	-	-	-	1	2	-	2	-	1	-	1	-
CO4	1	3	1	2	-	-	-	1	3	-	3	-	1	-	1	-
CO5	1	3	1	2	-	-	-	1	2	-	2	-	1	-	1	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
BOT106	HUMAN PHYSIOLOGY-I LAB	√	√	√	√		√	√	3,4

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT107**	**Title of the Course**	**BIOCHEMISTRY LAB**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**I**	**0**	**0**	**2**	**1**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	The student will be able to demonstrate knowledge in clinical as needed for the study and practice of Occupational Therapy.						

Course Outcomes	
CO1	To understand about carbohydrate& its application in therapeutic exercises and rehabilitation of sport injury.
CO2	To understand about protein& its application in practice of Occupational Therapy during rehab of various disease, trauma and fitness training.
CO3	To understand about lipid and nucleic acid& its application in practice of Occupational Therapyduring rehab of various disease, trauma and fitness training.
CO4	To understand about vitamin and enzyme and hormones & its application in practice of Occupational Therapy during rehab of various disease, trauma and fitness training.
CO5	To understand about Nutrition and its application in practice of Occupational Therapy during rehab of various disease, trauma and fitness training.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	CARBO HYDRATE	Practical aspect of followings: 1. Glycolysis. 2. TCA cycle. 3. Hormonal regulation of blood glucose, HbA1C and GTT.	4	CO1
2	PROTEIN	Practical aspect of followings: 1. Amino acids-protein structure 2. Effect of temperature on proteins- denaturation-coagulation; isoelectric pH & its importance 3. Decarboxylation- De-amination 4. Trans methylation transamination & their importance-Detoxification of ammonia including urea cycle. 5. Clinical biochemistry: Relevance of blood levels of, urea, & uric acid, Protein in urine.	4	CO2
3	LIPIDS AND NUCLIC ACID	Practical aspect of followings: 1. Fatty acids 2. lipids—β oxidation of saturated fatty acids and its energetics and regulation of fat metabolism in adipose tissue Ketone bodies formation & utilization., cholesterol/HDL/LDL/VLDL etc, Liver function test & Renal function test. 3. Genetic code-catabolism of purine –gout.	4	CO3
4	VITAMINS & ENZYMES & HORMONES	Practical aspect of followings: 1. Enzymes, properties, mechanism of action, Clinical importance & regulation of activity 2. Hormones. 3. Mechanism of hormone action, Effects of hormones on various metabolism & hormonal disorders.	4	CO4
5	NUTRITION & SPECIAL TOPICS	Practical aspect of followings: 1. Balance diet, Nutritional disorder, SDA (special dynamic action) 3. Respiratory quotient (RQ) & Basal Metabolism rate (BMR) 4. Water electrolyte balance & acid base balance.	4	CO5

Reference Books:

1. Fundamentals of Biochemistry-by Dr. Deb Jyoti Das,
2. Essentials of Bio-chemistry by U. Satyanarayan, 1st Edition, Books and Allied Publications.
3. Textbook of Biochemistry –Chatterje and Shinde
4. Text book of Medical Bio-Chemistry – Dr. M.N. Chettergee, 5th Edition, Jaypee Publication.
5. Fundamental of Bio-Chemistry –Dr. A. C .Deb, 5th Edition, Central Publication.

e-Learning Source:

1. https://youtu.be/t5DvF5OVr1Y
2. https://youtu.be/gggC9vctvBQ
3. https://youtu.be/ufvZ8bYtyO8
4. https://youtu.be/Q6R4o-oECxs

	Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	2	2	-	-	-	1	2	1	-	-	2	2	1	-
CO2	1	3	1	3	-	-	-	2	3	-	-	-	1	1	1	-
CO3	1	3	1	2	-	-	-	1	2	2	-	-	1	1	1	-
CO4	1	3	1	2	-	-	-	1	3	-	-	-	1	2	1	-
CO5	1	3	1	2	-	-	-	1	2	1	-	-	1	1	1	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
BOT107	BIOCHEMISTRY LAB	√	√	√	√		√	√	3,4

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT108**	**Title of the Course**	**FUNDAMENTALS OF OCCUPATIONAL-I LAB**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**I**	**0**	**0**	**2**	**1**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	The student will be able to demonstrate the practical knowledge in human anatomy as needed for the study and practice of Occupational Therapy.						

Course Outcomes	
CO1	To understand Practical aspect of Occupational Therapy, To understand the history to established the profession.
CO2	To understand Practical aspect & importance of the history and philosophical base of the profession of occupational therapy.
CO3	To understand Practical aspect T& apply the occupational therapy foundations and concepts in assessment and interventional various occupational practice settings and across lifespan within a broad continuum of care
CO4	To understand Practical aspect & evaluate and assess occupation and its determinants as well as use occupation as a means to improve health and well-being of communities.
CO5	To create the use meaningful activities in promotion of health & lessen disabilities.

Unit No.	**Title of the Unit**	**Content of Unit**	**Contact Hrs.**	**Mapped CO**
1	History and Scope of OT	Knowledge of various assessment methods and their demonstrations on models for the topics covered in theory.	4	CO1
2	Occupational Science		4	CO2
3	Principles and methods of Assessment		4	CO3
4	Assessment and diagnostic tools in OT		4	CO4
5	ADL and Return to Work		4	CO5

Reference Books:

1. Helen S. Willard (Editor), Clare S. Spackman (Editor), H.L. Hopkins H.D. Smith (1993), Willard & Speckman Occupational Therapy, 8th edition, Lippincott Williams and Wilkins; USA, 976 pages.
2. Turner, Ann; Foster, Margaret, (1992), Occupational Therapy and Physical Dysfunction: Principles, Skills and Practice, Third Edition, Churchill Livingstone Publications, UK
3. Lorraine Williams Pedretti, (1996) Occupational Therapy: Practice Skills for Physical Dysfunction, 4th edition, Mosby Publications, UK, 896 pages
4. GARDINER M.D. (2005), THE PRINCIPLES OF EXERCISE THERAPY DENA GARDINER, 4TH EDITION, Ss venture Publications
5. Catherine Anne Trombly ,1983, Occupational therapy for physical dysfunction, 2nd edition, Williams & Wilkins; (January 1, 1983), USA, 512 pages
6. Carolyn Kisner PT MS, Lynn Allen Colby PT MS , John Borstad PT PhD , Therapeutic Exercise: Foundations and Techniques (Therapeutic Exercise: Foundations and Techniques) Seventh Edition.

e-Learning Source:

1. https://youtu.be/P_RQuRzp7SE
2. https://youtu.be/G7UccfwRvwY
3. https://youtu.be/dNnTubgY2gs
4. https://youtu.be/7OkyTUZelpw
5. https://youtu.be/4WX0cp0fn5c

	Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	2	2	-	-	-	1	2	-	-	3	3	3	3	-
CO2	1	3	1	2	-	-	-	2	3	-	-	3	3	2	2	-
CO3	1	3	2	1	-	-	-	1	2	-	-	2	2	1	2	-
CO4	1	3	1	2	-	-	-	1	3	2	-	2	3	1	3	-
CO5	1	3	1	2	-	-	-	1	2	2	-	3	1	2	2	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	**Course Title**	**Attributes**							**SDGs No.**
BOT108	FUNDAMENTALS OF OCCUPATIONAL-I LAB	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√	√		√	√	**3,4**

INTEGRAL UNIVERSITY, LUCKNOW

INTEGRAL INSTITUTE OF ALLIED HEALTH SCIENCES & RESEARCH

DEPARTMENT OF OCCUPATIONAL THERAPY

BACHELOR OF OCCUPATIONAL THERAPY (BOT)

SYLLABUS

YEAR/ SEMESTER: I/II

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT109**	**Title of the Course**	**HUMAN ANATOMY-II**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**II**	3	1	0	**4**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	To understand the location, structural configuration of the thoracic region, abdomen and brain & its application in practice of Occupational Therapy.						

Course Outcomes	
CO1	To understand about the structure of thoracic wall& its application in practice of Occupational Therapy.
CO2	To understand about the Viscera of thoracic cavity& its application in practice of Occupational Therapy.
CO3	To understand about the Abdomen and Pelvis& its application in practice of Occupational Therapy.
CO4	To understand about the Head and Neck & its application in practice of Occupational Therapy.
CO5	To understand about the Neuro Anatomy and its application in practice of Occupational Therapy.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	THORACIC WALL	1 Skeleton of thoracic wall, Thoracic outlets and inlets 2 Joints of thoracic wall, Movements of thoracic wall 3 Muscles of thoracic wall, Fascia of Thoracic wall 4 Nerves of Thoracic wall, Vasculature of Thoracic wall, Breast 5 Relevant applied anatomy	8	CO1
2	VISCERA OF THORACIC CAVITY	1 Pleura, Lungs, and Tracheobronchial Tree 2 Overview of mediastinum, superior mediastinum, Posterior mediastinum, anterior mediastinum 3 Diaphragm: Attachments, action and nerve supply of diaphragm. 4 Layer of pericardium, Introduction to heart, External feature and blood supply of heart 5 Location and branches of ascending arch of aorta and descending aorta, Location and tributaries of Brachiocephalic veins and superior vena cava. Azygos system of veins	8	CO2
3	ABDOMEN & PELVIS	1 Introduction to abdomen, its regions and quadrants, Abdominal wall, layers of abdominal wall 2 Muscles of anterior and posterior abdominal wall their origin insertion, action and nerve supply, Rectus sheath. 3 Overview of abdominal viscera and digestive tract. 4 Components of urinary system, their location and orientation in abdomino-pelvic cavity. Brief account of kidneys. 5 Reproductive system: Components of male & female reproductive system and their location. 6 Relevant clinical anatomy	8	CO3
4	HEAD AND NECK	1 Overview of different aspect of cranium 2 Scalp and muscles of facial expression, Layers of scalp, nerve and blood supply 3 Muscles of mastication, their origin, insertion action and nerve supply 4 Layers of deep cervical fascia, extent and attachment of investing layer, Sternocleidomastoid, digastric and strap muscles of neck. 5 Triangles of neck: Subdivision of anterior and posterior triangle and their contents. 6 Common carotid & external carotid artery & Internal Jugular vein. 7 Joints: Details of temporomandibular joint, atlantoaxial and atlanto-occipital joint.	8	CO4
5	NEURO-ANATOMY	1 General organization of C.N.S and brief outline of CNS structures, Blood supply of brain 2 Cranial nerves -Peripheral nervous system, Autonomic Nervous System -Sensory system 3 Neuro-muscular junction, nuro-muscular integration 4 Important ascending and descending tracts. Cranial nerves 5 Brief account of visual and auditory path way **6** CSF – Formation, absorption and circulation in the ventricular system.	8	CO5

Reference Books:

1 B.D. Chaurasia's, Human Anatomy-Volume 1, 2, 3 CBS Publishers & Distributors.
2 Inderbir Singh, Textbook of Anatomy with Colour Atlas-Vol. 1, 2, 3 Jaypee Brothers.
3 Snell-Clinical Anatomy by regions -Lippincott.
4 McMinn's Last's Anatomy-Regional and applied, Churchill Livingstone.
5 Cunningham Manual of Practical Anatomy Vol. I, II, III, Churchill Livingstone.
6 Williams & Warwick, Gray's Anatomy-Churchill Livingstone.
7 Extremities by Quining Wasb
8 Basic Anatomy & Physiology by Smout and McDowell

e-Learning Source:

1 https://youtu.be/X5RUFXZZBH4
2 https://youtu.be/06o_XNKwuOE
3 https://youtu.be/4Sab-2E4ZDI

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO / CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	1	2	-	-	-	1	1	1	3	2	2	1	1	1
CO2	1	3	2	2	-	-	-	1	1	1	3	2	2	1	1	1
CO3	1	3	1	2	-	-	-	1	1	1	3	2	1	1	1	1
CO4	2	3	1	2	-	-	-	1	1	1	3	2	2	1	1	1
CO5	1	3	1	2	-	-	-	1	1	1	3	2	1	1	1	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
BOT109	HUMAN ANATOMY-II	√	√	√	√		√	√	**3,4**

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT110**	**Title of the Course**	**HUMAN PHYSIOLOGY-II**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**II**	3	1	0	**4**
Pre-Requisite	**Nil**	**Co-requisite**	Nil				
Course Objectives	The student will be able to demonstrate knowledge in human physiology as needed for the study and practice of Occupational Therapy.						

Course Outcomes	
CO1	To understand about excretory function& its application in practice of Occupational Therapy.
CO2	To understand about gastro intestinal tract& its application in practice of Occupational Therapy.
CO3	To understand about Nervous system and special senses& its application in practice of Occupational Therapy.
CO4	To understand about Endocrine system & its application in practice of Occupational Therapy.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	EXCRETORY FUNCTION	1 General introduction, structure and functions of kidney , Formation of urine- filtration, re-absorption and secretion 2 Physiology of micturition, Renal circulation, Plasma clearance test 3 Neurogenic bladder, Automatic bladder 4 Relevant applied physiology	8	CO1
2	GASTRO INTESTINALTRACT (GIT)	1 Motility nervous control, blood circulation 2 Composition, secretary function of saliva gastric juices 3 HCL secretion, pancreas gall bladder and small intestine 4 Digestion and absorption of food, Defecation and swallowing reflex 5 Relevant applied physiology	8	CO2
3	NERVOUS SYSTEM & SPECIALSENSES	1 Receptor physiology, synaptic structure, reflexes, physiology of touch, pain, temperature and Proprioception, labyrinth. 2 Function of sensory and motor cortex, ascending and descending tracts, motor function of spinal cord and reflexes, spinal cord transaction and spinal shock 3 Hypothalamus, thalamus, basal ganglia, cerebellum, limbic system, RAI system, learning memory and condition reflex 4 Posture, equilibrium and sleep, cerebral blood flow, CSF and brain metabolism 5 Eye, Ear, Olfaction, Taste. 6 Relevant applied physiology	8	CO3
4	ENDOCRINE SYSTEM	1 General organization of endocrine glands 2 Releasing hormones from hypothalamus, Anterior & Posterior pituitary hormones – physiological actions, regulation & disorders 3 Thyroid Hormones, Parathyroid Hormones – physiological actions, regulation &disorders 4 Pancreatic hormones, Adrenal cortex & medulla– physiological actions, regulation& disorders 5 Mechanism of hormone action, Relevant applied physiology	8	CO4
5	REPRODUCTIVE SYSTEM	1 Female menstrual cycle and related hormone puberty and menopause 2 Function of oestrogens, progesterone and testosterone 3 Male spermatogenesis and function of testosterone, 4 Sucking reflex- pregnancy and lactation. 5 Relevant applied physiology	8	CO5

Reference Books:

1. Concise Medical Physiology by Chaudhuri, 4th Edition; New Central Book Agency.
2. Human Physiology, Sembulingam; 4th ed, Jaypee Brothers.
3. A Textbook of Practical Physiology, Ghai C L, Jaypee Brothers.
4. Human Physiology, Chatterjee. Vol: 1&2; 10th Edition; Medical & Allied Agency
5. Textbook of Medical Physiology by Guyton & Hall, 11th Edition; Elsevier Publication
6. Samson Wright's Applied Physiology 13th ed, Keele CA, Neil E &Joels N, Oxford Medical Pub.
7. Principles of Anatomy & Physiology, Tortora, 8th Edition; Harper & Row Publication.
8. Textbook of Physiology : Ganong

e-Learning Source:

1. https://youtu.be/_jagVY0XMVk
2. https://youtu.be/cXPuW6ZwcFE
3. https://youtu.be/VAEmxt78bBI
4. https://youtu.be/vLdNX5Te1Xo

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO / CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	1	2	-	-	-	1	2	-	2	2	1	-	1	1
CO2	1	3	1	3	-	-	-	1	3	-	3	3	2	-	1	1
CO3	1	3	1	2	-	-	-	1	2	-	2	3	1	-	1	1
CO4	1	3	1	2	-	-	-	1	3	-	3	2	1	-	1	1
CO5	1	3	1	2	-	-	-	1	2	-	2	2	1	-	1	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
BOT110	HUMAN PHYSIOLOGY-II	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√	√		√	√	**3,4**

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT111**	**Title of the Course**	**FUNDAMENTALS OF OCCUPATIONAL-II**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**II**	**3**	**1**	**0**	**4**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	**The student will be able to learn, analyze and explore the knowledge of basics of Fundamentals of Occupational**						

Course Outcomes	
CO1	To understand the meaning and role of occupations and impact of health and environmental conditions on occupational performance of persons, groups, and populations.
CO2	To understand & explain the meaning and dynamics of occupation and activity, including the interaction of areas of occupation, performance skills, performance patterns, activity demands, context(s) and environments, and client factors.
CO3	To apply and demonstrate basic skill in activity analysis and its role in therapeutic activity selection and implementation.
CO4	To apply and acquire knowledge in using therapeutic techniques in training ADL (activities of daily living) to help them to line independently.
CO5	To analyze and demonstrate task analysis in the areas of occupation, performance skills, performance patterns, activity demands, context(s), and environments, and client factors to formulate an intervention plan.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	Application of Occupational Therapy in	1. General Medical & Surgical Conditions. 2. Psychiatric conditions 3. Mentally backward &subnormal 4. Orthopaedics condition/disorders 5. Paediatrics 6. Geriatrics 7. Hearing & Visual Impairment 8. Cardiopulmonary conditions 9. Neurological conditions 10. Leprosy	8	CO1
2	Environments for Practice	1. Acute Care Rehabilitation Center 2. Occupational Therapy in the School System 3. Adult Day Care 4. Long - Term Care 5. Home care & Private Practice 6. Wellness Program 7. Hospice Care	8	CO2
3	Basic concepts of human development	1. Aspects of human development: physical, motor, sensory cognitive, emotional, cultural, social. 2. Factors influencing human development: Biological environment. 3. Principles of Maturation.	8	CO3
4	Human Development Process	1. Posture and movements 2. Spatiotemporal adaptation 3. Sensory - motor - sensory Integration 4. Reflex and reaction maturation o Stability & mobility development 5. Theories ▪ Learning Theory ▪ Behavioral Theory ▪ Social learning Theory ▪ Maturation Theory of Arnold Gesell ▪ Psychoanalytic theory of Freud, Erik Erikson ▪ Cognitive Theory of Jean Piaget ▪ Humanistic Self-Theory	8	CO4
5	Definitions, Classification / Components, Assessments / Evaluations	Performance Areas o 1. ADL, Personal care, medication routine & health maintenance, Functional & community mobility, Functional communication, Sexual expression (15 hrs.) 2. Work and Productive Activities (15 hrs.) ▪ FCE, WCE, PCE – work assessments Driving evaluation home management educational activities. ▪ Play / Leisure Activities (15 hrs.) 3. Functions of Play ▪ Social ▪ Physical ▪ Sensory ▪ Emotional ▪ Perceptual ▪ Cognitive o 4. Content and structure of play 5. Theories of play ▪ Erikson ▪ Freud ▪ Piaget ▪ Reilly 6. Role of play in Occupational Therapy process	8	CO5

Reference Books:

1. Helen S. Willard (Editor), Clare S. Spackman (Editor), H.L. Hopkins H.D. Smith (1993), Willard & Speckman Occupational Therapy, 8th edition, Lippincott Williams and Wilkins; USA, 976 pages.
2. Turner, Ann; Foster, Margaret, (1992), Occupational Therapy and Physical Dysfunction: Principles, Skills and Practice, Third Edition, Churchill Livingstone Publications, UK
3. Lorraine Williams Pedretti, (1996) Occupational Therapy: Practice Skills for Physical Dysfunction, 4th edition, Mosby Publications, UK, 896 pages
4. Catherine Anne Trombly ,1983, Occupational therapy for physical dysfunction, 2nd edition, Williams & Wilkins; (January 1, 1983), USA, 512 pages
5. Margarett Hollis, Massage for therapist: Margarett Hollis

e-Learning Source:

1. https://youtu.be/X5RUFXZZBH4
2. https://youtu.be/06o_XNKwuOE
3. https://youtu.be/4Sab-2E4ZDI

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO / CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	-	2	1	-	-	-	1	1	1	2	1	n3	2	1
CO2	1	3	-	2	-	-	-	-	1	-	1	2	1	3	2	1
CO3	2	3	-	2	-	-	-	-	1	1	1	2	1	3	2	1
CO4	1	3	-	1	-	-	-	-	1	-	1	2	1	3	2	1
CO5	2	3	-	1	-	-	-	-	1	-	1	2	1	3	2	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
BOT111	**FUNDAMENTALS OF OCCUPATIONAL-II**	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√	√		√	√	**3,4**

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT112**	**Title of the Course**	**GENERAL PSYCHOLOGY AND SOCIOLOGY**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**II**	**2**	**1**	**0**	**3**
Pre-Requisite	**Nil**	**Co-requisite**	Nil				
Course Objectives	The student will be able to demonstrate knowledge in clinical as needed for the study and practice of Occupational Therapy.						

Course Outcomes	
CO1	To understand about psychology& its application in Occupational Therapy practice.
CO2	To understand about arousal, emotion & awareness, perception & its application in Occupational Therapy practice.
CO3	To understand about testing, personality and behaviour, attitude & its application in Occupational Therapy practice.
CO4	To understand about basics of sociology and social factors in health & disease& its application in Occupational Therapy practice.
CO5	To understand about social group, family, culture and health, social problems& its application in Occupational Therapy practice.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	BASICS OF PSYCHOLOGY	1. Beginning the study of psychology & Subfields and methods of psychology, Genetics and behaviour, Nature and nurture 2. Development of behavior and principle of learning 3. Thinking and problem solving 4. Drives and motivation	6	CO1
2	AROUSAL, EMOTION & AWARENESS, PERCEBOTION	1. Psychological basis of arousal & emotion Emotional feelings & Situations 2. Objective Perception, Perceptual Constancies 3. DeBOTh Perception, Influences on Perception	6	CO2
3	TESTING, PERSONALITY AND BEHAVIOR, ATTITUDE	1. What is Personality, Theories of Personality, Shaping of Personality, Coping Behaviour 2. The Nature of Attitudes, Prejudice & Discrimination, Development of Attitudes, Social Movements 3. Behavior Disorders, Personality disorders 4. Uses of Psychological Tests, Intelligence & Aptitude Tests, Personality tests	6	CO3
4	BASICS OF SOCIOLOGY AND SOCIAL FACTORS IN HEALTH & DISEASE	1. Definition and scope of sociology 2. Importance of sociology to health care professionals. 3. The meaning and nature of socialization 4. The role of social factors in health and illness	6	CO4
5	SOCIAL GROUP, FAMILY, CULTURE AND HEALTH, SOCIAL PROBLEMS	1. Concept of culture, Culture and behaviour, Culture and Health Disorders 2. Population explosion, Poverty and unemployment 3. Beggary, Juvenile delinquency 4. Alcoholism, Problems of women in employment	6	CO5

Reference Books:

1. Fundamentals of Biochemistry-by Dr. Deb Jyoti Das,
2. Essentials of Bio-chemistry by U. Satyanarayan, 1st Edition, Books and Allied Publications.
3. Textbook of Biochemistry –Chatterje and Shinde
4. Text book of Medical Bio-Chemistry – Dr. M.N.Chettergee, 5th Edition, Jaypee Publication.
5. Fundamental of Bio-Chemistry – Dr.Dr.A.C.Deb, 5th Edition, Central Publication.
6. Bio-Chemistry introduction – Mekee, 2nd Edition, McGraw-Hill Publication

e-Learning Source:

1. https://youtu.be/PqRvnUofNCU
2. https://youtu.be/a1oHRj_t_Bw
3. https://youtu.be/ghMjJRIksp0
4. https://youtu.be/PI1Awx--KtM

	Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	-	-	1	-	3	3	2	2	-	2	-	-	-	-	1
CO2	2	-	-	2	-	3	2	2	1	-	2	-	-	-	-	2
CO3	2	-	-	1	-	3	3	1	2	-	1	-	-	-	-	1
CO4	2	-	-	1	-	3	3	2	1	-	2	-	-	-	-	1
CO5	2	-	-	2	-	3	2	2	1	-	2	-	-	-	-	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
BOT112	GENERAL PSYCHOLOGY AND SOCIOLOGY	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√	√		√	√	**3,4**

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**ES101**	**Title of the Course**	**ENVIRONMENTAL STUDIES**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**II**	**2**	**1**	**0**	**3**
Pre-Requisite	**Nil**	**Co-requisite**	**Nil**				
Course Objectives	To study about the Environment and the Ecosystem. To study about the Natural Resources. To study about Biodiversity and Conservation. To study Environmental pollution, its policies and practices. To study Human Population and Environmental Ethics.						

Course Outcomes

CO1	Gain knowledge about environment and ecosystem
CO2	Students will learn about natural resource, its importance and environmental impacts of human activities on natural resource.
CO3	Gain knowledge about the conservation of biodiversity and its importance.
CO4	Aware students about problems of environmental pollution, its impact on human and ecosystem and control measures.
CO5	Students will learn about increase in population growth and its impact on environment.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	Introduction to Environment and Ecosystem	Environment, its components and segments, Multidisciplinary nature of Environmental studies, Concept of Sustainability and sustainable development, Environmental movements, Ecosystem, Structure & Function, Energy flow in the Ecosystem, Ecological Pyramids and Ecological Succession.	6	CO1
2	Natural Resources	Renewable and non-renewable, Soil erosion and desertification, Deforestation, Water: Use and over exploitation, Impacts of large Dams, Case studies	6	CO2
3	Biodiversity and Conservation	Levels of biological diversity, Hot spots of biodiversity, India as a Mega Diversity Nation, Endangered and endemic species of India, Threats to Biodiversity, Conservation of Biodiversity, Ecosystem and biodiversity services.	6	CO3
4	Environmental Pollution, Policies and Practices	Environmental pollution, Solid waste management, Ill effects of fireworks, Climate change, Ozone layer depletion, acid rain and impacts on human communities and Environment, Environmental Laws: Environment Protection Act, Wildlife protection Act, Forest conservation Act, Convention on Biological Diversity (CBD), Tribal rights, Human wildlife conflicts.	6	CO4
5	Human Population and the Environment	Human population growth: Impacts on environment, human health and welfare, Resettlement and rehabilitation of project affected persons, Environmental ethics, Environmental communication and public awareness, case studies.	6	CO5

Reference Books:

1) Agarwal, K.C. 2001 Environmental; Biology, Nidi Pub. Ltd. Bikaner.
2) Bharucha Erach, The Biodiversity of India, Mapin Pub. Pvt. Ltd., Ahemdabad-380, India.
3) Brunner R.C. 1989. Hazardous waste incineration, Mc Graw Hill
4) Clark R.S. Marine Pollution, Clanderon Press Oxford (TB)
5) Cunningham W.P.2001.Cooper, T.H. Gorhani, E & Hepworth, Environmental encyclopedia, Jacob Publication House, Mumbai.
6) De. A.K. Environmental chemistry Willey Eastern Limited.
7) Glick, H.P.1993 water in crisis, Pacific Institute for studies in dev, Environment & security, Stockholm Env, Institute, Oxford Univ, Press 473 p.
8) Hawkins R .E. Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay.
9) Heywood, V.H. & Watson, R. T.1995.Global biodiversity Assessment. Cambridge Univ. Press 1140 p.
10) Jadhave, H. and Bhosale, V. M. 1995 Environmental protection and laws, Himalaya pub, house, Delhi.284 p.
11) Mckinnery, M.L. and School, R. M.1996 Environmental science systems and solutions, web enhanced edition 639 p.
12) Mhaskar A.K. Matter Hazardous, Techno Science Pub (TM)
13) Miller T.G. Jr, Environmental Ecology, W. B. Saunders Co.USA,574 p. 16
14) Odum, E.P.1997.Fundamental chemistry, Goel Pub House Meerut.
15) Survey of the Environment, The Hindu (M).
16) Sharma B.K.2001.Environmental Chemistry, Goel Pub House Meerut

e-Learning Source:

https://byjus.com/biology/difference-between-environment-and-eCOsystem.
https://www.youtube.com/watch?v=dRPl4TB8w7k
https://www.youtube.com/watch?v=3fbEVytyJCk
https://www.vedantu.com/biology/conservation-of-biodiversity
https://youmatter.world/en/definition/soil-erosion-degradation-definition/
https://byjus.com/biology/difference-between-environment-and-eCOsystem.

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
CO2	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
CO3	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
CO4	-	-	-	-	-	-	2	-	-	-	2	-	-	-	-	-	-
CO5	-	-	-	-	-	-	1	1	-	-	2	-	-	-	1	1	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs Common for all branches/Disciplines

Course Code	Course Title	Attributes							SDGs No.
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
ES01	Environmental Studies					√			6,13,14,& 15

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**LN131**	**Title of the Course**	**EFFECTIVE COMMUNICATION AND MEDIA STUDIES IN ENGLISH**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	II	**2**	**1**	**0**	**3**
Pre-Requisite	10+2	**Co-requisite**	UG				
Course Objectives	The students will be able to: Developing the art of communication and learning basic skills of conversation along with knowledge of Professional and Media Skill Development, Career enhancement tips and goal-oriented learning.						

Course Outcomes	
CO1	Students will be able to develop Formal and Informal Spoken skills, learn career development skills and learn to have clear idea of goal setting.
CO2	Students will learn about the importance and usage of mass media and ways to develop their media skills.
CO3	Academic Writing will help students to format and structure the content they create which will help them to be professional writers and bloggers.
CO4	The unit will help students to learn and develop better conversation skills in formal and informal setup. They will learn the proper usage and pronunciation in various accent enabling them to converse in competitive environment.
CO5	The unit enables students to put all the theoretical knowledge to practice, assuring complete learning and implementation.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	**COMMUNICATION INPRACTICE**	1. Do's and Don'ts of Formal and Informal Communication 2. Tips on Career Management- Setting Clear Goals, Skill Development, Network Building andProfessional Relationship Etiquette, Knowing Aptitude and Values. 3. Classroom Practice- 4. JAM (Just A Minute) 5. Extempore, Rebuttal, Forum, Role Play.	**7**	CO1
2	**MASS COMMUNICATIONAND JOURNALISM**	1. Introduction to Mass Communication. 2. Types of Mass Communication/ Mass Media 3. Impact of Globalization on Mass Media 4. Socio Political Impact of Digital Media 5. Advertisement- Ethical and Unethical Advertisement, Jingles, Tag Lines, Punch Lines, MediaWriting.	**7**	CO2
3	**FUNDAMENTALS OF ACADEMIC WRITING**	1. The four main types of academic writing- Descriptive, Analytical, Persuasive and Critical. 2. Writing Book Review, 3. Introduction to Descriptive Writing 4. Techniques and Features of Descriptive Writing - Character, Place and Travel Description,Event, Movie and Food description.	**7**	CO3
4	**CONVERSATION SKILLS**	1. Phonetics- Learning Speech Mechanism (Voice and Accent) A. Introduction- Self and Other-Guest Speaker / Colleague B. Polite Conversational Etiquette 1. Varieties of English Language; their difference in terms of Pronunciation, Vocabulary andSpelling: A. British B. American	**7**	CO4
5	**ACADEMIC PROJECT**	1. Creating News Bytes 2. Writing News Report 3. Creating Jingles and Tag Lines for Famous Brands. 4. Writing Editorial on a Topical Subject 5. Writing Film Reviews 6. Travelogue	**4**	CO5

Reference Books:

1. Kumar, Sanjay and Pushpalata. Communication Skills. Oxford University Press, Oxford 2011.
2. Raman, Meenakshi, and Sangeeta Sharma. *Technical Communication: Principals and Practice*. Second Edition, Oxford University Press, 2012.
3. Raina, Roshan Lal, Iftikhar Alam, and Faizia Siddiqui. *Professional Communication*. Himalaya PublicationHouse2012.
4. Agarwal, Malti. Professional Communication. Krishna'sEducationalPublishers.2016.
5. Carnegie, Dale. *How to Win Friends and Influence People in theDigitalAge*.SimonandSchuster.2012.
6. Covey, Stephen R. *The Seven Habits of Highly SuccessfulPeople*.FreePress.1989.
7. Verma, KC. TheArtofCommunication.Kalpaz.2013.
8. Alred, G. J., Brusaw, C. T., & Oliu, W. E. (2011). Handbook of Technical Writing, Tenth Edition (10th ed.). St. Martin's Press
9. Sherman, Barbara. (2014). Skimming and Scanning Techniques. Liberty University Press.
10. Barker, Alan. (2011). Improve Your Communication Skills. Kogan Page Pub. [later edited version to be added if any]11Seely, John. (1998). The Oxford Guide to Effective Writing and Speaking. Oxford UP.

e-Learning Source:

1. http://www.uBOTunotes.com/notes-professional-communication-unit-i-nas-104...
2. https://www.docsity.com/en/subjects/professional-communication/
3. https://lecturenotes.in/download/note/22690-note-for-communication-skills-for-profession...
4. https://www.files.ethz.ch/isn/125396/1154_trystnehru.pdf
5. https://kr.usembassy.gov/martin-luther-king-jr-dream-speech-1963/#:~:text=I%20have%20a%20dream%20that,skin%20but%20by%20their%20.

	Course Articulation Matrix: (Mapping of COs with POs and PSOs)																
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO4	PSO5	PSO6	PSO7
CO1	3	1	1	2	2	1	2	3	3	1	2	3	2	2	3	2	3
CO2	3	3	2	2	2	2	2	1	2	2	2	2	2	3	3	3	3
CO3	3	2	2	3	2	3	3	2	2	3	2	2	3	3	3	3	3
CO4	2	3	1	2	3	1	2	2	3	3	3	3	3	2	2	2	2
CO5	3	2	2	1	2	3	3	3	2	3	2	3	2	2	3	3	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
LN131	**Effective Communication and Media Studies in English**	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		✓	✓	✓				✓	**3,4, 6**

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT113**	**Title of the Course**	**HUMAN ANATOMY-II LAB**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**II**	0	0	2	1
Pre-Requisite	**NIL**	**Co-requisite**	Nil				
Course Objectives	The student will be able to demonstrate knowledge in human anatomy as needed for the study and practice of Occupational Therapy.						

Course Outcomes	
CO1	To understand about the structure of thoracic wall& its application in practice of Occupational Therapy.
CO2	To understand about the Viscera of thoracic cavity& its application in practice of Occupational Therapy.
CO3	To understand about the Abdomen and Pelvis& its application in practice of Occupational Therapy.
CO4	To understand about the Head and Neck & its application in practice of Occupational Therapy.
CO5	To understand about the Neuro Anatomy and its application in practice of Occupational Therapy.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	THORACIC WALL	1. Practical demonstration of skeleton of thoracic wall 2. Practical demonstration of movement of thoracic wall 3. Practical demonstration of surface land marks of thoracic wall	4	CO1
2	VISCERA OF THORACIC CAVITY	1. Practical demonstration of surface anatomy of lung and heart 2. Auscultatory land marks for heart and lungs 3. Surface land marks and functional demonstration of diaphragm	4	CO2
3	ABDOMEN & PELVIS	1. Functional demonstration of abdominal muscle 2. Practical demonstration of region of abdomen 3. Practical demonstration of pelvic floor muscle 4. Surface and palpatory landmarks for pelvis	4	CO3
4	HEAD AND NECK	1. Functional demonstration of muscles responsible for facial expression 2. Palpation of muscle responsible for facial expression 3. Functional demonstration of muscles of mastication 4. Palpation of muscles of mastication 5. Functional demonstration and palpation of cervical muscles 6. Demonstration of movement and palpatory structure of TMJ and atlantoaxial, Atlantooccipital joint.	4	CO4
5	NEURO-ANATOMY	1. Functional demonstration of CNS. 2. Functional demonstration of cranial and spinal nerve.	4	CO5

Reference Books:

1. B.D. Chaurasia's, Human Anatomy-Volume 1, 2, 3 CBS Publishers & Distributors.
2. Inderbir Singh, Textbook of Anatomy with Colour Atlas-Vol. 1, 2, 3 Jaypee Brothers.
3. Snell-Clinical Anatomy by regions -Lippincott.
4. McMinn's Last's Anatomy-Regional and applied, Churchill Livingstone.
5. Cunningham Manual of Practical Anatomy Vol. I, II, III, Churchill Livingstone.
6. Williams & Warwick, Gray's Anatomy-Churchill Livingstone.
7. Extremities by Quining Wasb
8. Basic Anatomy & Physiology by Smout and McDowell

e-Learning Source:

1. https://youtu.be/X5RUFXZZBH4
2. https://youtu.be/06o_XNKwuOE
3. https://youtu.be/4Sab-2E4ZDI

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO / CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	1	2	-	-	-	1	1	1	3	2	2	1	1	1
CO2	1	3	2	2	-	-	-	1	1	1	3	2	2	1	1	1
CO3	1	3	1	2	-	-	-	1	1	1	3	2	1	1	1	1
CO4	2	3	1	2	-	-	-	1	1	1	3	2	2	1	1	1
CO5	1	3	1	2	-	-	-	1	1	1	3	2	1	1	1	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
BOT113	**HUMAN ANATOMY–II LAB**	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√	√		√	√	**3,4**

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT114**	**Title of the Course**	**HUMAN PHYSIOLOGY-II LAB**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**II**	0	0	2	**1**
Pre-Requisite	**Nil**	**Co-requisite**	Nil				
Course Objectives	The student will be able to demonstrate knowledge in human physiology as needed for the study and practice of Occupational Therapy.						

Course Outcomes	
CO1	To understand about excretory function& its application in practice of Occupational Therapy.
CO2	To understand about gastro intestinal tract& its application in practice of Occupational Therapy.
CO3	To understand about Nervous system and special senses& its application in practice of Occupational Therapy.
CO4	To understand about Endocrine system & its application in practice of Occupational Therapy.
CO5	To understand about reproductive system and its application in practice of Occupational Therapy.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	EXCRETORY FUNCTION	Practical demonstration of excretory function on models, charts and videos	4	CO1
2	GASTRO INTESTINALTRACT(GIT)	Practical demonstration of gastro intestinal tract on models, charts and videos	4	CO2
3	NERVOUS SYSTEM &SPECIALSENSES	1. Practical demonstration of nervous system and special senses on models, charts and videos 2. Practical demonstration of sensory and motor function on models, charts and videos 3. Practical demonstration of posture and equilibrium	4	CO3
4	ENDOCRINESYSTEM	Practical demonstration of endocrine system on models, charts and videos	4	CO4
5	REPRODUCTIVESYSTEM	Practical demonstration of reproductive system on models, charts and videos	4	CO5

Reference Books:

1. Concise Medical Physiology by Chaudhuri, 4th Edition; New Central Book Agency.
2. Human Physiology, Sembulingam; 4th ed, Jaypee Brothers.
3. A Textbook of Practical Physiology, Ghai C L, Jaypee Brothers.
4. Practical physiology by Vijaya Joshi; Vora Medical Publication.
5. Human Physiology, Chatterjee. Vol: 1&2; 10th Edition; Medical & Allied Agency
6. Textbook of Medical Physiology by Guyton & Hall, 11th Edition; Elsevier Publication
7. Samson Wright's Applied Physiology 13th ed, Keele CA, Neil E &Joels N, Oxford Medical Pub.
8. Principles of Anatomy & Physiology, Tortora, 8th Edition; Harper & Row Publication.
9. Textbook of Physiology : Ganong

e-Learning Source:

1. https://youtu.be/_jagVY0XMVk
2. https://youtu.be/cXPuW6ZwcFE
3. https://youtu.be/VAEmxt78bBI
4. https://youtu.be/vLdNX5Te1Xo

	Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	1	2	-	-	-	1	2	-	2	2	1	-	1	1
CO2	1	3	1	3	-	-	-	1	3	-	3	3	2	-	1	1
CO3	1	3	1	2	-	-	-	1	2	-	2	3	1	-	1	1
CO4	1	3	1	2	-	-	-	1	3	-	3	2	1	-	1	1
CO5	1	3	1	2	-	-	-	1	2	-	2	2	1	-	1	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
BOT114	HUMAN PHYSIOLOGY-II LAB	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√	√		√	√	**3,4**

Integral University, Lucknow

Effective from Session: 2025-26							
Course Code	**BOT115**	**Title of the Course**	**FUNDAMENTALS OF OCCUPATIONAL-II LAB**	**L**	**T**	**P**	**C**
Year	**I**	**Semester**	**II**	0	0	2	**1**
Pre-Requisite	**Nil**	**Co-requisite**	Nil				
Course Objectives	The student will be able to demonstrate the knowledge in basic of exercise therapy as needed for the study and practice of Occupational Therapy						

Course Outcomes: After the successful course completion, learners will develop following attributes:	
CO1	To understand the meaning and role of occupations and impact of health and environmental conditions on occupational performance of persons, groups, and populations.
CO2	To understand & explain the meaning and dynamics of occupation and activity, including the interaction of areas of occupation, performance skills, performance patterns, activity demands, context(s) and environments, and client factors.
CO3	To apply and demonstrate basic skill in activity analysis and its role in therapeutic activity selection and implementation.
CO4	To apply and acquire knowledge in using therapeutic techniques in training ADL (activities of daily living) to help them to line independently.
CO5	To analyze and demonstrate task analysis in the areas of occupation, performance skills, performance patterns, activity demands, context(s), and environments, and client factors to formulate an intervention plan.

Unit No.	**Title of the Unit**	**Content of Unit**	**Contact Hrs.**	**Mapped CO**
1	Application of Occupational Therapy in	Knowledge of various assessment methods and their demonstration on models /clients in the following areas A.D.L. Work and Productive activities Play / Leisure Performance context Environmental context Temporal aspects	4	CO1
2	Environments for Practice		4	CO2
3	Basic concepts of human development		4	CO3
4	Human Development Process		4	CO4
5	Definitions, Classification / Components, Assessments / Evaluations		4	CO5

Reference Books:

1. Helen S. Willard (Editor), Clare S. Spackman (Editor), H.L. Hopkins H.D. Smith (1993), Willard & Speckman Occupational Therapy, 8th edition, Lippincott Williams and Wilkins; USA, 976 pages.
2. Turner, Ann; Foster, Margaret, (1992), Occupational Therapy and Physical Dysfunction: Principles, Skills and Practice, Third Edition, Churchill Livingstone Publications, UK
3. Lorraine Williams Pedretti, (1996) Occupational Therapy: Practice Skills for Physical Dysfunction, 4th edition, Mosby Publications, UK, 896 pages
4. Catherine Anne Trombly ,1983, Occupational therapy for physical dysfunction, 2nd edition, Williams & Wilkins; (January 1, 1983), USA, 512 pages
5. Margarett Hollis, Massage for therapist: Margarett Hollis

e-Learning Source:

1. https://youtu.be/X5RUFXZZBH4
2. https://youtu.be/06o_XNKwuOE
3. https://youtu.be/4Sab-2E4ZDI

	Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	-	2	1	-	-	-	1	1	1	2	1	3	2	1
CO2	1	3	-	2	-	-	-	-	1	-	1	2	1	3	2	1
CO3	2	3	-	2	-	-	-	-	1	1	1	2	1	3	2	1
CO4	1	3	-	1	-	-	-	-	1	-	1	2	1	3	2	1
CO5	2	3	-	1	-	-	-	-	1	-	1	2	1	3	2	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	**Course Title**	**Attributes**							**SDGs No.**
BOT115	**Fundamentals of Occupational-II Lab**	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√	√		√	√	**3,4**