BACHELOR OF PHYSIOTHERAPY

Era University, Lucknow

Course Outline: 2024-2025

Name of the Program	**BPT**			**Year/ Semester:**	**III year/VI sem**
Course Name	**RESEARCH METHODOLOGY AND BIOSTATISTICS**	**Course Code:**	**BPT 601**	**Type:**	**Theory**
Credits	**04**			**Total Sessions Hours:**	**40 Hours**
Evaluation Spread	**Internal Continuous Assessment**	**30 Marks**		**End Term Exam:**	**70 Marks**
Type of Course	Compulsory	• Core		Creative	Life Skills
Course Objectives	1. Incorporate evidence based practice into clinical decisions of patient care and Management.				
Course Outcomes (CO): *After the successful course completion, learners will develop following attributes:*					
CO1	Develop Research Skills				
CO2	Master Data Analysis				
CO3	Critically Evaluate Research				
CO4	Communicate Finding				
CO5	Apply Evidence-Based Practice				
Pedagogy	Interactive, discussion-bases, student-centered, presentation.				
Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 Bed Side behavior or Interaction in Class: 02				

Session Details	**Topic**	**Hours**	**Mapped CO**
UNIT 1	a. **Introduction to Research methodology**: a. Meaning of research, objectives of research, Motivation in research, Types of b. Research & research approaches, Research methods vs methodology, Criteria for good research. **b. Research problem:** a. Statement of research problem, Statement of purpose and objectives of research problem,	**10**	**CO1**

	Necessity of defining the problem c. **Research design:** a. Meaning of research design, Need for research design, Features for good design, Different research designs, Basic principles of research design. d. **Measurement & scaling techniques**: a. Measurement in research- Measurement scales, sources of error in measurement, Technique of developing measurement tools, Meaning of scaling, its classification, important scaling techniques.		
UNIT 2	**Methods of data collection and Measures of Central Tendency** a. **Methods of data collection**: collection of primary data, collection data through questionnaires & schedules, Difference between questionnaires & schedules. **b. Computer technology:** Introduction to Computers, Computer Application in Research Computers & Researcher. **BIOSTATISTICS** c. **Introduction:** Meaning, definition, characteristics of statistics. Importance of the study of statistics, Branches of statistics, Statistics and health science, Parameters and Estimates, Variables and their types, Measurement scales. d. **Tabulation of Data**: Basic principles of graphical representation, Types of diagrams –histograms, frequency polygons, smooth frequency polygon, cumulative frequency curve, Normal probability curve. e. **Measures of Central Tendency**: Need for measures of central Tendency, Definition and calculation of Mean – ungrouped and grouped, interpretation and calculation of Median-ungrouped and grouped, Meaning and calculation of Mode, Geometric mean &Hormonic mean, Guidelines for the use of various measures of central tendency.	**15**	**CO2** **CO3**
UNIT 3	**Probability and Standard Distributions and Analysis of variance & covariance** a. **Measures of Dispersion**: Range, mean deviation, standard deviation & variance. b. **Probability and Standard Distributions**: Meaning of probability of standard distribution, the binominal distribution, the normal distribution, Divergence from normality – skewness, kurtosis. c. **Correlation & regression**: Significance, correlation coefficient, linear regression & regression equation. d. **Testing of Hypotheses**, Level of significance, Degrees of freedom.	**15**	**CO5** **CO2** **CO4** **CO3**

	e. **Chi-square test**, test of Goodness of fit & student t-test. f. **Analysis of variance & covariance**: Analysis of variance (ANOVA), what is ANOVA? Basic principle of ANOVA, ANOVA technique, Analysis of Co variance (ANACOVA) g. **Sampling:** Definition, Types- simple, random, stratified, cluster and double h. sampling. Need for sampling - Criteria for good samples, Application of sampling in community, Procedures of sampling and sampling designs errors.		

CO-PO and PSO Mapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	-	-	-	3	-	-	-	-	1
CO2	2	-	-	-	1	-	-	-	-	1
CO3	2	-	-	-	1	-	-	-	-	1
CO4	2	-	-	-	-1	-	-	-	-	2
CO5	2	-	-	-	2	-	-	-	-	1

Strong contribution-3, Average contribution-2, Low contribution-1,

Suggested Readings:

Text- Books	1. Research Methodology by C. R. Kothari, New age international
Reference Books	1. Principles of Research Methodology: A Guide for Clinical Investigators, Phyllis G. Supino, Jeffrey S. Borer, Springer Nature; 1st edition
Para Text	• **https://www.youtube.com/watch?v=jvv9paQDYy0&list=PLk3poRqYftlhDGto5oSxeNeFWHzajbVuA** • **https://www.youtube.com/watch?v=0dRtFDlb2Wk&list=PLQnNyE1lxfVIZp27OorkI1uO5z8bJQVKD**

Recapitulation & Examination Pattern

Internal Continuous Assessment:

Component	Marks	Pattern
Class Test	12	Contains **01 long question.** Question carries **04**Marks. **02 Short questions.** Each question carries **02**Marks **04 multiple choice questions.** Each question carries **01**Marks
Class participation or any other	04	This to be made on activities and instruction given by subject teacher.
Marks Assignments/Project:	04	Assignment to be made on topics and instruction given by subject teacher
Class Presentation:	04	This to be made on topics and instruction given by subject teacher
Bed Side behavior or Interaction in Class	02	This to be made on activities and instruction given by subject teacher.
Attendance	04	As per policy
Total Marks	**30**	

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BACHELOR OF PHYSIOTHERAPY

Era University, Lucknow

Course Outline: 2024-2025

Name of the Program	**Bachelor of Physiotherapy**			**Year/Semester:**	**III year/VI sem**
Course Name	**Neurology and Neurosurgery-II**	**Course Code:**	**BPT/ 602/ BPP 602**	**Type:**	**Theory & Practical**
Credits	**05**			**Total Sessions Hours:**	**60 Hours**
Evaluation Spread	**Internal Continuous Assessme:**	**30 Marks**		**End Term Exam:**	**70Marks**
Type of Course	Compulsory	✓ Core		Creative	Life Skill
Course Objectives	1. The objective of this course is that the student will be able to learn to identify and describe the parts of nervous system & investigation, diagnosis & management. 2. The students will able to understand the various condition & diseases with their etiology, pathophysiology, clinical features, classification & treatment methods for various neurological conditions. 3. The students will able to understand & handle the different neurological cases & enhance education with practical learning.				
CourseOutcomes(CO): *Afterthesuccessfulcoursecompletion,learnerswilldevelopfollowing attributes:*					
CO1	To understand the infections & brain tumors & spinal tumors.				
CO2	Identify and explain the infection of brain & spinal cord.				
CO3	To understand and identify and assess the different neurological conditions.				
CO4	To analyze the impact of different neuro surgeries.				
CO5	The students will be able to differentiate neurological cases and handling the cases will become easier as they can relate theoretical knowledge with practical learning.				
Pedagogy	Interactive, discussion-bases, student-centered, presentation.				
Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 marks Bed Side behavior or Interaction in Class: 02 marks				
Session Details	**Topic**			**Hours**	**Mapped CO**
Unit1	**Infections and brain tumors and spinal tumors** 1. Spinal cord disorders 2. Brain tumors and spinal tumors 3. Infections of brain and spinal cord			20	CO1 & CO2

Unit2	**Motor neuron diseases and polyneuropathy** **1.** Motor neuron diseases 2. Multiple sclerosis 3. Disorders of neuromuscular junction 4. Muscle diseases 5.Polyneuropathy	20	CO3
Unit3	**Neuro Surgeries** 1. Focal peripheral neuropathy 2. Toxic, metabolic and environmental disorders **Practical** Practice session for different conditions.	20	CO4 & CO5

CO-POandPSOMapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	3	2	1	2	-	-	3
CO2	3	2	3	3	3	-	2	1	-	2
CO3	3	3	3	3	2	-	3	-	-	2
CO4	3	2	2	3	3	-	3	1	2	3
CO5	3	3	3	3	3	-	3	1	1	3

Strongcontribution-3, Averagecontribution-2, Lowcontribution-1,

Suggested Readings:

Text-Books	1. Davidson's Principles and practice of Medicine 2. Neurology and neurosurgery illustrated- Lindsasy
Reference Books	1. Textbook of Neurology- Adams and Victor
ParaText	**Unit1:** https://youtu.be/bEEj8-V7Ojw?si=la28c17YJ3zqI7ep **Unit2:** https://youtu.be/dg_DntAnU8M?si=lx4Cwi_rifXZu3Z7 **Unit3:** https://youtu.be/auP95Xr59F0/si=SsWAdrBlUUn3vuKF

Recapitulation & Examination Pattern

Internal Continuous Assessment:

Component	Marks	Pattern
Class test	12	Contains **01 long question.** question carries **04**Marks. **02 Short questions.** Each question carries **02**Marks **04 multiple choice questions.** Each question carries **01**Marks
Class participation or any other	04	This to be made on activities and instruction given by subject teacher.
Marks Assignments/Project:	04	Assignment to be made on topics and instruction given by subject teacher
Class Presentation:	04	This to be made on topics and instruction given by subject teacher
Bed Side behavior or Interaction in Class	02	This to be made on activities and instruction given by subject teacher.
Attendance	04	As per policy
Total Marks	**30**	

BACHELOR OF PHYSIOTHERAPY

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Course Outline: 2024-2025

Name of the Program	**Bachelor of Physiotherapy**			**Year/Semester:**	**III year/ VI sem**
Course Name	**Community Medicine-II**	**Course Code:**	**BPT 603**	**Type:**	**Theory**
Credits	**04**			**Total Sessions Hours:**	**40 Hours**
Evaluation Spread	**Internal Continuous Assessment**	**30 Marks**		**End Term Exam:**	**70 Marks**
Type of Course	Compulsory	✓ Core		Creative	Life Skill
Course Objectives	1. The objective of this course is to prepare the students to function as community. 2. They should have a brief idea of the prevention at individual, National and International level for various health issues. 3. To make the students aware of environmental, social, financial, personal, occupational issues of the patients & to inculcate in the students the habit of considering the above aspects while rendering patient care.				
CourseOutcomes(CO): *Afterthesuccessfulcoursecompletion,learnerswilldevelopfollowing attributes:*					
CO1	To understand the preventive medicine in obstetrics, pediatrics & geriatrics.				
CO2	To understand the nutrition & health.				
CO3	To understand the hospital waste management & occupational health.				
CO4	To understand the disaster management.				
CO5	The students will be able to understand mental health & learn about health education.				
Pedagogy	Interactive, discussion-bases, student-centered, presentation.				
Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 marks Bed Side behavior or Interaction in Class: 02 marks				
Session Details	**Topic**			**Hours**	**Mapped CO**
Unit1	**Preventive Medicine in Obstetrics, Pediatrics & Geriatrics** 1. MCH problems, Antenatal, Intranatal & post natal care, Care of children, Child health problems, Rights of child & National policy for children, MCH services & indicatpors of MCH care, Social welfare programmes 2. Nutrition & health: Classification of foods, nutritional profiles of principal foods, Environment & health, Pollution control, Disposal of waste			15	CO1 & CO2

Unit2	**Hospital waste management & occupational heath** **1.** Disaster management: Natural & man-made disasters, disaster impact & response, relief phase, epidemiologic surveillance & disease control, nutrition, rehabilitation 2. Occupational health: occupational environment, hazards, diseases, prevention of occupational diseases.	10	CO3 & CO4
Unit3	**Mental Health & health education** 1. Characteristics of mentally healthy person, types of mental illness, causes of mental ill health, prevention. Emphasis on community aspects of mental health, Role of physiotherapist in mental health problems 2. Concept of health education, principles, practice of health education	15	CO5

CO-POand PSO Mapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	1	3	3	2	1	3	-	-	3
CO2	3	2	2	3	3	-	3	2	-	2
CO3	3	3	2	3	2	-	2	-	-	2
CO4	3	2	2	3	1	-	3	1	2	2
CO5	3	3	3	3	-	-	3	1	1	3

Strongcontribution-3, Averagecontribution-2, Lowcontribution-1,

SuggestedReadings:

Text-Books	Textbook of Preventive & Social Medicine- Dr. J E Park
ParaText	**Unit1:** https://www.youtu.be/B3hJEtCQmRA?si=5NVQHkJnPqY-CqOW **Unit2:** https://youtu.be/gKSPSKiB9PE/si=aHiLglVr-PyHOYyM **Unit3:** https://youtu.be/8ALxkCybttY/si=alcFU8uBlaSx09k-

Recapitulation & Examination Pattern

Internal Continuous Assessment:

Component	Marks	Pattern
Class test	12	Contains **01 long question.** question carries **04**Marks. **02 Short questions.** Each question carries **02**Marks **04 multiple choice questions.** Each question carries **01**Marks
Class participation or any other	04	This to be made on activities and instruction given by subject teacher.
Marks Assignments/Project:	04	Assignment to be made on topics and instruction given by subject teacher
Class Presentation:	04	This to be made on topics and instruction given by subject teacher
Bed Side behavior or Interaction in Class	02	This to be made on activities and instruction given by subject teacher.
Attendance	04	As per policy
Total Marks	**30**	

BACHELOR OF PHYSIOTHERAPY

Era University, Lucknow

Course Outline: 2024-2025

Name of the Program	**BPT**			**Year/Semester:**	**III year/ VI sem**
Course Name	**Orthopaedics - II**	**Course Code:**	**BPT 604/ BPP 604**	**Type:**	**Theory & Practical**
Credits	**05**			**Total Sessions Hours:**	**60 Hours**
Evaluation Spread	**Internal Continuous Assessment:**	**30 Marks**		**End Term Exam:**	**70 Marks**
Type of Course	○ Compulsory	◉ Core		○ Creative	○ Life Skill
Course Objectives	1. Understand clinical features, complications, and management of congenital and acquired deformities, and bone and joint diseases. 2. Learn diagnostic and treatment approaches for various deformities and bone diseases. 3. Understand causes, clinical features, complications, and management of inflammatory and degenerative conditions, syndromes, neuromuscular disorders, and cervical/lumbar pathologies. 4. Apply multidisciplinary approaches in diagnosing and treating these conditions. 5. Learn indications and management principles of key orthopedic surgeries. 6. Understand clinical features and management of regional musculoskeletal conditions				

Course Outcomes (CO) : *After the successful course completion, learners will develop following attributes:*

Course Outcome(CO)	Attributes
CO1	Ability to diagnose and plan treatment for deformities and bone diseases.
CO2	Improved clinical skills in managing complex cases.
CO3	Ability to diagnose and manage complex musculoskeletal and neuromuscular disorders.
CO4	Enhanced skills in holistic and multidisciplinary patient care.
CO5	Ability to identify and manage appropriate surgical interventions
CO6	Develop skills in diagnosing and treating regional musculoskeletal conditions.
Pedagogy	Interactive, discussion-bases, student-centered , presentation.

Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 Marks Bed Side behavior or Interaction in Class: 02 Marks		
Session Details	**Topic**	**Hours**	**Mapped CO**
UNIT I Disease of Bones and Joints	1. **Deformities** - clinical features, complications, medical and surgical management of the following Congenital and Acquired deformities. • Congenital Deformities - CTEV. CDH. Torticollis. Scoliosis. Flat foot. Vertical talus. Hand anomalies- syndactyly, polydactyly and ectrodactly. Arthrogryposis multiplexcongenita (amyoplasia congenita). Limb deficiencies- Amelia and Phocomelia. Klippelfeil syndrome. Osteogenesis imperfect (fragile ossium). Cervical rib. • Acquired Deformities - Acquired Torticollis. Scoliosis. Kyphosis. Lordosis. Genu varum. Genu valgum.Genu recurvatum Coxavara. Pescavus. Hallux rigidus. Hallux valgus. Hammer toe. Metatarsalgia . 2. **Disease of Bones and Joints** : Causes, Clinical features, Complications, Management- medical and surgical of the following conditions : • Infective conditions: Osteomyelitis (Acute / chronic). Brodie's abscess. TB spine and major joints like shoulder, hip, knee, ankle, elbow etc. • Arthritic conditions: Pyogenic arthritis. Septic arthritis.Syphilytic infection of joints. • Bone Tumors: classification, clinical features, management - medical and surgical of the following tumors : Osteoma. Osteosarcoma, Osteochondroma. Enchondroma. Ewing's sarcoma. Gaint cell tumor. Multiple myeloma. Metastatic tumors. • Perthes disease, Slipped Capital Femoral Epiphysis and Avascular Necrosis. • Metabolic Bone Diseases: Rickets. Osteomalacia, Osteopenia. Osteoporosis.	**20 Hrs.**	**CO1 & CO2**
UNIT II Inflammatory and Degenerative Conditions	3. **Inflammatory and Degenerative Conditions**: causes, clinical feature, complications, deformities, radiological features, management- conservative and surgical for the following conditions : Osteoarthritis. Rheumatoid arthritis. Ankylosing spondylitis Gouty arthritis. Psoriatic arthritis. Hemophilic arthritis.Still's disease (juvenile rheumatoid arthritis).Charcot's joints. Connective Tissue Disorders- Systemic Lupus Erythematosis, Scleroderma, Dermatomyositis, Poliomyelitis, Mixed connective tissue Disease (MCTD) 4. **Syndromes :** Causes, Clinical features, complications,	**20 Hrs.**	**CO3 & CO4**

	management- conservative and surgical of the following :Cervico brachial syndrome. Thoracic outlet syndrome. Vertebro- basilar syndrome. Scalenus syndrome. Costoclavicular syndrome. Levator scapulae syndrome. Piriformis syndrome. 5. **Neuromuscular Disorders** : Definition, causes, clinical feature, complications, management. (Multidisciplinary approach) medical and surgical of the following conditions : Cerebral palsy.Poliomyelitis.Spinal Dysraphism.Leprosy. 6. **Cervical and Lumbar Pathology** : Causes, clinical feature, patho-physiology, investigations, management-Medical and surgical for the following : Prolapsed interverbral disc (PID), Spinal Canal Stenosis. Spondylosis (cervical and lumbar) Spondylolysis. Spondylolisthesis. Lumbago/ Lumbosacral strain. Sacralisation. Lumbarisation. Coccydynia.Hemivertebra **PRACTICAL** Practical based on radiological features		
UNIT III Orthopedic Surgeries	7. **Orthopedic Surgeries**: Indications, Classification, Types, Principles of management of the following Surgeries : Arthrodesis. Arthroplasty (partial and total replacement).Osteotomy , External fixators. Spinal stabilization surgeries(Harrington's, Luque's, Steffi plating) etc , Limb re-attachments. 8. **Regional Conditions** : Definition, Clinical features and management of the following regional conditions Shoulder: Periarthritic shoulder (adhesive capsulitis). Rotator cuff tendinitis. Supraspinatus Tendinitis. Infraspinatus Tendinitis. Bicipital Tendinitis. Subacromial Bursitis. • **Elbow:** Tennis Elbow. Golfer's Elbow. Olecranon Bursitis (student's elbow). Triceps Tendinitis. • Wrist and Hand: De Quervain's Tenosynovitis. Ganglion. Trigger Finger/ Thumb. Mallet Finger, Carpal Tunnel Syndrome, Dupuytren's Contracture. • Pelvis and Hip : IT Band Syndrome. Piriformis Syndrome. Trochanteric Bursitis. • Knee: Osteochondritis Dissecans. Prepatellar and Suprapatellar Bursitis.Popliteal Tendinitis. Patellar Tendinitis. Chondromalacia Patella. Plica Syndrome. Fat Pad Syndrome (Hoffa's syndrome). • Ankle and Foot: Ankle Sprains. Plantar Fasciitis / Calcaneal Spur.Tarsal Tunnel Syndrome. Achilles Tendinitis. Metatarsalgia. Morton's Neuroma.	**20 Hrs.**	**CO5 & CO6**

CO-PO Mapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	3	1	3	2	-	-	1
CO2	2	2	3	2	1	1	1	-	-	1
CO3	3	3	3	3	1	3	2	-	-	1
CO4	1	2	3	2	1	3	2	-	-	1
CO5	3	3	3	3	1	3	2	-	-	1
CO6	3	3	3	3	1	3	2	-	-	1

Strongcontribution-3, Average contribution-2, Low contribution-1,

Suggested Readings:

Text-Books	1. Essential Orthopaedics: Maheshwari 2. Textbook of Orthopaedics: Kotwal and Natrajan 3. Apley System of orthopedics and Fracture
Reference Books	1. Essential Clinical Orthopaedics by John Ebenezer 2. Outline of fracture: Adams
ParaText	1. https://youtu.be/rM2qWxqLZMc 2. https://youtu.be/l9yGc73lrss 3. https://youtu.be/pnKaBMvVUs0 4. https://youtu.be/A6j1VW2JE9M 5. https://youtu.be/DWP4GmVGpeA

Recapitulation & Examination Pattern

Internal Continuous Assessment:

Component	Marks	Pattern
Class test	12	Contains 01 long queation. question carries 04 marks 02 short questions. each question carries 02 marks 04 multiple choice questions. each question carries 01 marks
Class participation or any other	04	This to be made on activities and instruction given by subject teacher
Marks assignments/project	04	Assignment to be made on topics and instruction given by subject teacher
Class presentation	04	This to be made on topics and instruction given by subject teacher
Bed side behavior or interaction in class	02	This is to be made on activities and instruction given by subject teacher
attendance	04	As per policy
Total marks	**30**	

BACHELOR OF PHYSIOTHERAPY

Era University, Lucknow

Course Outline: 2024-2025

Name of the Program	**Bachelor of Physiotherapy**			**Year/ Semester:**	**III year/ VI sem**
Course Name	**Sports**	**Course Code:**	**BPT 605/ BPP 605**	**Type:**	**Theory+ Practical**
Credits	**05**			**Total Sessions Hours:**	**60 Hours**
Evaluation Spread	**Internal Continuous Assessment:**	**30 Marks**		**End Term Exam:**	**70 Marks**
Type of Course	Compulsory	✓ Core		Creative	Life Skill
Course Objectives	Student will learn the principles, technique, and effects of different concepts of anatomy, physiology, pathology, pharmacology & radiology in the restoration of basic knowledge of sports and musculoskeletal injuries and also implementation of evidence based practical approach.				
Course Outcomes (CO): *After the successful course completion, learners will develop following attributes:*					
Course Outcome (CO)	**Attributes**				
CO1	Students will be able to understand treatment guidelines of different soft tissue injuries.				
CO2	Student will understand about mechanism of different soft tissue injuries.				
CO3	Student will acquire knowledge of conservative management of different sports injuries.				
CO4	Student will understand about mechanism and management of different lower limb soft tissue injuries.				
Pedagogy	Interactive, discussion-bases, student-centered, presentation.				
Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 marks Bed Side behavior or Interaction in Class: 02 marks				

Session Details	**Topic**	**Hours**	**Mapped CO**
Unit 1	1. **Treatment guidelines for soft tissue injuries:** Acute, Sub acute and chronic stages. Repair of soft tissues-ruptureof muscle, tendon and Ligamen.tous tears. Soft tissue injuries- prevention and rehabilitationof, Lateral ligament sprain of ankle. Rotator cuff injuries. Collateral and Cruciate injuries ofknee. Meniscal injuries of knee. Supraspinatus and Bicipitaltendonitis . Pre patellar andSubacromial bursitis.Tennis and Golfer's elbow. Hamstring strains, Quadriceps contusion,TA rupture. Dequervain's tenosynovitis.Trigger and Mallet finger.Plantar fasciitis. Wrist sprains.	8	CO1

Unit 2	**Mechanism soft tissue injuries of the Head & face** **Head & face** – maxillofacial injuries, helmet compression syndrome. Soft Tissue Injuries - Define terms such as sprains, strains, contusion, tendinitis,rupture, tenosynovitis, tendinosis, bursitis.	5	CO2
Unit 3	**Mechanism soft tissue injuries of the upper limb-** **Shoulder:** Periarthritic shoulder (adhesive capsulitis). Rotator cuff tendinitis. Supraspinatus Tendinitis.Infraspinatus Tendinitis. Bicipital Tendinitis.Subacromial Bursitis. scapular dyskinesis • **Elbow:** Tennis Elbow. Golfer's Elbow. Olecranon Bursitis (student's elbow). Triceps Tendinitis. • **Wrist and Hand**: Gamekeeper's thumb.DeQuervain's Tenosynovitis. Ganglion. Trigger Finger/ Thumb. Mallet **Finge**r, Carpal Tunnel Syndrome, Dupuytren's Contracture.	7	CO3
Unit 4	**Mechanism soft injuries of Pelvis and lower limb** • **Pelvis and Hip** : IT Band Syndrome. Piriformis Syndrome. Trochanteric Bursitis.osteitis pubis • **Knee:** OsteochondritisDissecans. Prepatellar and Suprapatellar Bursitis.Popliteal Tendinitis. , swimmers knee, patello-femoral pain syndrome. Meniscal injuries of knee. Cruciate injuries of knee.Medial and lateral collateral injuries of knee. Lateral ligament of ankle. Wrist sprains. Strains quadriceps,hamstrings, calf, biceps, triceps etc. Contusions-quadriceps, gluteal, calf, deltoid etc. **Patellar Tendinitis**. Chondromalacia Patella.Plica Syndrome. Fat Pad Syndrome (Hoffa'ssyndrome). **Ankle and Foot**: Ankle Sprains. -shin splint, bursitis, turf toe syndrome Plantar Fasciitis / Calcaneal Spur. Tarsal Tunnel Syndrome.Achilles Tendinitis.Metatarsalgia.Morton's Neuroma.	20	CO4
Practical	Evaluation of Physical Fitness. Musculoskeletal screening. Assessment of Upper &lower limb complex. Special Physical Test of Different sports injuries. Method of application of crepe bandaging for different sports injuries.	20	

CO-PO Mapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	3	1	2	1		3	1	2
CO2	1	1	2	3	2	3	1		2	1
CO3	2			1		1		2	2	3
CO4			1		2		3		1	

Strongcontribution-3, Averagecontribution-2, Lowcontribution-1,

Suggested Readings:

Reference Books-

1. Prentice, William E., Rehabilitation Techniques in Sports Medicine, St. Louis: McGraw Hill Publishing Company.
2. Gray, Gary W., Lower Extremity Functional Profile, 1st Edition, Adrian, MI: Wynn Marketing.
3. Prentice, W. "Therapeutic Modalities for Allied Health Professionals" McGraw Hill.
4. Norkin& White: Measurement of Joint Motion - A Guide to Goniometry - F.A.Davis.
5. Dvir: Isokinetics: Muscle Testing, Interpretation and Clinical Applications, W.B. Saunders.

e-Learning Source:	1. https://www.researchgate.net/publication/278786039_'Shin_Splints'_-_Medial_Tibial_Stress_Syndrome_A_Review_of_the_Literature 2. https://www.researchgate.net/publication/7535422_Sports_massage_A_comprehensive_review 3. https://www.weber.edu/wsuimages/employeewellness/Resistance%20Training.pdf

Recapitulation & Examination Pattern

Internal Continuous Assessment:

Component	**Marks**	**Pattern**
Class Test	12	Contains **01 long question.** question carries **04**Marks. **02 Short questions.** Each question carries **02**Marks **04 multiple choice questions.** Each question carries **01**Marks
Class participation or any other	04	This to be made on activities and instruction given by subject teacher.
Marks Assignments/Project:	04	Assignment to be made on topics and instruction given by subject teacher
Class Presentation:	04	This to be made on topics and instruction given by subject teacher
Bed Side behavior or Interaction in Class	02	This to be made on activities and instruction given by subject teacher.
Attendance	04	As per policy
Total Marks	**30**	

BACHELOR OF PHYSIOTHERAPY

Era University, Lucknow

Course Outline: 2024-2025

Name of the Program	**Bachelor of Physiotherapy**			**Year/Semester:**	**III year/VI sem**
Course Name	Health Promotion, Fitness And Wellness	**Course Code:**	**BPT- 606/ BPP 606**	**Type: 4th Sem**	**Theory & Practical**
Credits	**05**			**Total Sessions Hours:**	**60 Hours**
Evaluation Spread	**Internal Continuous Assessment:**		**30 Marks**	**End Term Exam:**	**70Marks**
Type of Course	Compulsory		✓ Core	Creative	Life Skill
Course Objectives	This course includes discussion on the theories of health and wellness, including motivational theory, locus of control, public health initiative, and psycho-Social, spiritual and cultural consideration. Health risks, screening, and assessment considering epidemiological principles are emphasized. Risk reduction strategies for primary and secondary prevention, including programs for special populations are covered.				

Course Outcomes(CO): *After the successful course completion ,learners will develop following attributes:*

CO1	Students will develop a strong understanding of health promotion theories and models, learning how to apply them to design and implement interventions that improve health behaviors and well-being in diverse populations.
CO2	Students will acquire the skills to design, implement, and evaluate fitness and wellness programs that promote physical activity, healthy lifestyles, and overall fitness, tailored to various age groups and fitness levels.
CO3	Students will be able to assess health risks and develop preventive strategies to manage and reduce the risk of chronic diseases through fitness and lifestyle interventions.
CO4	Students will develop the ability to create culturally sensitive health promotion and fitness programs that respect and respond to the needs of diverse populations.
CO5	Students will learn to measure the effectiveness of health promotion initiatives and fitness programs, using data to continuously improve and adapt interventions to meet the needs of target populations.
Pedagogy	Interactive, discussion-based, student-centered, presentation.
Internal Evaluation Mode	Mid-term Examination: 30 Marks Class test: 12 Marks Class participation or any other : 04 Marks Assignments/Project: 04 Marks Attendance: 04 Marks Class Presentation: 04 Bed Side behavior or Interaction in Class: 02

Session Details	**Topic**	**Hours**	**Mapped CO**
Unit1	1. Prevention practice: a holistic perspective for physiotherapy a. Defining Health b. Predictions of Health Care c. Comparing Holistic Medicine and Conventional Medicine d. Distinguishing Three Types of Prevention Practice. 2. Healthy People a. Definition of healthy people b. Health education Resources c. Physiotherapist role for a healthy community.	20	CO1

Unit2	3. Key concepts of fitness a. Defining & Measuring Fitness b. Assessment of Stress with a Survey c. Visualizing Fitness d. Screening for Mental and Physical Fitness e. Body Mass Index calculations. 4. Fitness training a. Physical Activities Readiness Questionnaire b. Physical Activities Pyramid c. Exercise Programs d. Evidence-Based Practice. 5. Health, fitness, and wellness issues during childhood and adolescence	20	CO2
Unit3	6. Health, fitness, and wellness during adulthood 7. Women's health issues: focus on pregnancy: 8. Prevention practice for older adults 9. Resources to optimize health and wellness 10. Health protection. 11. Prevention practice for musculoskeletal conditions 12. Prevention practice for cardiopulmonary conditions 13. Prevention practice for neuromuscular conditions 14. Prevention practice for integumentary disorders 15. Prevention practice for individuals with developmental disabilities 16. Marketing health and wellness.	20	CO3

CO-POandPSOMapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	3	1	3	-	3	2	-	-	-	-	-	-	-
CO2	3	3	3	3	-	3	1	1	-	-	-	-	-	-
CO3	3	2	3	3	-	3	2	2	-	-	-	-	-	-
CO4	3	2	3	3	-	3	3	3	-	-	-	-	-	-
CO5	3	2	3	3	-	3	2	2	-	-	-	-	-	-

Strongcontribution-3, Averagecontribution-2, Lowcontribution-1,

Suggested Readings: Therapeutic Exercise Foundations And Techniques By Colby Kisner Carolyn

Reference Books	The Fitness Mindset by Brian Keane **Fitness Professional's Handbook** by Edward T. Howley (Editor); Dixie L. Thompson (Editor) Handbook Of Health & Fitness **Janeswill'sFoundations For Health Promotion**
ParaText	https://economictimes.indiatimes.com/top-trending-products/books/10-best-books-on-health-fitness-nutrition/articleshow/99136044.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst https://www.youtube.com/watch?v=5jxbMqWL0ag https://www.youtube.com/watch?v=a0C997rWafA https://www.youtube.com/watch?v=h3GIxIWZKYs

Recapitulation & Examination Pattern

Internal Continuous Assessment:

Component	Marks	Pattern
Class test	12	Contains **01 long question.** question carries **04**Marks. **02 Short questions.** Each question carries **02**Marks **04 multiple choice questions.** Each question carries **01**Marks
Class participation or any other	04	This to be made on activities and instruction given by subject teacher.
Marks Assignments/Project:	04	Assignment to be made on topics and instruction given by subject teacher
Class Presentation:	04	This to be made on topics and instruction given by subject teacher
Bed Side behavior or Interaction in Class	02	This to be made on activities and instruction given by subject teacher.
Attendance	04	As per policy
Total Marks	**30**	