SEMESTER – I
For who joined from 2025 onwards

Programme Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25PE1	Core	History of Physical Education	Lecture	4	**4**

COURSE DESCRIPTION:
This course introduces the meaning, scope, and importance of Physical Education. It covers its historical development in India and major global sporting events. The foundational aspects, including philosophy, biology, psychology, and sociology, are explored. Various sports institutions, government schemes, and awards are discussed. Learning theories and principles are examined for effective sports training and education.

COURSE OBJECTIVES:
- Understand the meaning, scope, and importance of Physical Education.
- Learn about the historical development of Physical Education in India and worldwide.
- Explore the philosophical, biological, psychological, and sociological foundations.
- Gain knowledge of sports institutions, government schemes, and awards.
- Study learning theories and their application in sports training.

UNIT - I: INTRODUCTION (9 hrs)
Meaning, Definition and Scope of Physical Education - Aims and Objective of Physical Education – Need, Nature and Scope of Physical Education - Importance of Physical Education in present era.

UNIT- II - HISTORICAL DEVELOPMENT OF PHYSICAL EDUCATION IN INDIA (12hrs)
Physical Education in India: Pre Independence Period: Vedic age, Epic age,
Contributions of YMCA College of Physical Education-Physical Education in Ancient Greece (Sparta – Athens) – Rome - Ancient Olympic Games - Modern Olympic Games – Asian Games – Common Wealth Games

UNIT- III- FOUNDATION OF PHYSICAL EDUCATION (9 hrs)
Philosophical foundation - Idealism, Pragmatism, Naturalism, Realism, Humanism, Existentialism-Biological foundation – Introduction, Growth and Development and Body types-Psychological Foundation – Introduction, Learning process and theories.

UNIT – IV – INSTITUTIONS & TRAINING SCHEMES (9hrs)
Institutional & Training Schemes: Khelo India Programme, Fit India Movement, SAI, NCC, NSS, SDAT, NSO, SGFI, NSNIS, LNIPE - Schemes: State and Central Government

UNIT-V – SPORTS ORGANIZATIONS, TOURNAMENTS AND AWARDS: (9hrs)
Ministry of Youth Affairs and Sports- Association of Indian Universities - Indian Olympic Association - Tournaments at School, College & University Levels, Federations/Association Level Tournaments, District, State, Regional,National,Asisan Games and International Level. Awards: Arjuna award - Dronacharya award - Rajiv Gandhi Khel Rathna award.

TEXT BOOKS:

1. Kamlesh, M. L. (2021). Foundations of Physical Education. Sports Publication.
2. Ajmer Singh, M., Jagdish Baines ., & Gupta, BJagdar Singh Gill., Rachhhpal Singh Brar (2019). A Textbook on Essential of Physical Education . Kalyani Publications.

Unit – I: Book 1: Chapter – 1 & 2 (Pg No: 12 to 35)
Book 2: Chapter – 1 (Pg No: 10-25)
Unit – II: Book 2: Chapters – Contents – 2.Physical Education (Pg No:14-29)
Unit – III: Book 1: Chapter – 3 (Pg No 42-52)
Book: 2 Chapters – 3.History of Physical Education in India (Pg No 30-43)
Unit – IV: Book: 1 Chapters – 4 (Pg No:56-60)
Book :2 Chapters – Contents Title 4 (Pg No 44-53)
Unit: V: Book :2 Chapters – Contents Title 5 (Pg No: 54-59)

REFERECE BOOK(S):

1. Mishra, S. (2020). Handbook of Physical Education. Sports Publication.
2. Singh, H. (2023). Science of Sports Training. Khel Sahitya Kendra.

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. Website: https://swayam.gov.in
2. Courses: Free certified courses on Yoga and Indian philosophy (e.g., "Yoga and Wellness", "Introduction to Indian Philosophy")
   Offered by: Institutions like IGNOU, NIOS, and Morarji Desai National Institute of Yoga (MDNIY)

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
1.	Understand the fundamental concepts, scope, and importance of Physical Education.	K1/K2 - Understanding
2.	Analyze the historical development of Physical Education in India and globally.	K4 - Analysis
3.	Comprehend the philosophical, biological, and psychological foundations of Physical Education.	K3 - Application
4.	Explore various institutional and training schemes for sports and physical education development.	K4 - Analysis
5.	Gain insights into sports organizations and their functioning in India.	K3 - Application
6.	Recognize and appreciate prestigious sports awards and their significance.	K2/K6 - Understanding

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	1	3	0
CO2	3	9	3	1	0	0
CO3	9	3	9	3	3	0
CO4	3	9	9	9	3	0
CO5	9	3	3	3	9	1
CO6	3	3	1	0	3	9
Weightage	36%	30%	26%	17%	21%	11%

(9 - Strong, 3 - Moderate, 1-Low, 0 - No Contribution)

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2,PO5	PO3	PO4,PO6
CO2/K3/K4	PO2	PO1,PO3	PO4	PO5,PO6
CO3/K4/K5	PO1,PO3	PO2,PO4,PO5	-	-
CO4/K4	PO2,PO3	PO1,PO5	-,	PO6
CO5/K5	PO1	PO4,PO6	PO2,PO3,PO4	PO6
CO6/K2	PO6	PO1,PO2	PO3	PO4

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course in – charge **Signature of the HOD**

SEMESTER – I

Programme Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25PE2P	Core	Calisthenics , Aerobics, Pyramid, Minor Games, Drill &Marching	Practical	3	**5**

COURSE DESCRIPTION:

This practical course develops fitness, coordination, and teamwork through Calisthenics, Aerobics, Pyramid Formation, Marching, and Minor Games. It enhances endurance, agility, and rhythmic movement while promoting discipline and creativity. Assessment includes performance, execution accuracy, and teamwork in structured activities.

COURSE OBJECTIVES:

- To develop strength, flexibility, and coordination through structured calisthenics and aerobics exercises.
- To enhance teamwork, balance, and creativity through pyramid formations and group activities.
- To instill discipline, synchronization, and leadership skills through marching drills.
- To improve motor skills, reflexes, and agility through various minor games.
- To promote physical fitness, sportsmanship, and enjoyment in an engaging and interactive environment.

UNIT - I: UNIT I: CALISTHENICS (15 hrs)

Warm-up and Flexibility Drills- Basic Calisthenics Movements- Lower Body Strength- Core Strength- Intermediate Calisthenics Training- Advanced Calisthenics Techniques- Cool-down and Recovery Techniques- Practical Assessment Criteria.

UNIT- II – AEROBICS: (15 hrs)

Warm-up and Mobility Drills- Basic Aerobic Movements- Low-Impact Aerobics- High-Impact Aerobics- Dance-based Aerobics- Step Aerobics- Aqua Aerobics-Gymnastics Aerobics

UNIT- III- HUMAN PYRAMID (15 hrs)

Introduction to Human Pyramid Formation- Basic Pyramid Positions and Techniques- Basic Pyramid Structures- Types of Human Pyramid Formations- Dynamic Pyramids

UNIT – IV – MARCHING ` (15 hrs)

Introduction to Marching- Fundamental Marching Commands- Starting and Stopping Movements- Turning Movements- Types of Marching- Squad & Group Marching- Advanced Marching Techniques.

UNIT-V – MINOR GAMES (15 hrs)

Introduction to Minor Games- Categories of Minor Games- Recreational and Fun Games- Coordination and Reflex-Based Games- Team-Building & Strategy Games.

TEXT BOOKS:

1. Sharma, O. P. (2019). Minor Games and Physical Activities for Schools. Friends Publications.
2. Sajwan, M. S. (2019). Teaching Methods in Physical Education. Khel Sahitya Kendra.

Unit – I: Book 1: Chapter – 1 & 2 (Pg No: 10 to 15)
Book 2: Chapter – 1 (Pg No: 09-20)
Unit – II: Book 1: Chapters – 3 (PgNo: 56-58)
Unit – III: Book 1: Chapter – 4 (Pg No 42-52)
Book: 2 Chapters – 3 (Pg No 34-36)
Unit – IV: Book: 1 Chapters – 4 (Pg No:65-67)
Book: 2 Chapters – 4 (Pg No 62-63)
Unit: V: Book :2 Chapters – 5 (Pg No:75 – 79)

REFERECE BOOK(S):

1. Christopher Sommer (2018). Building the Gymnastic Body: The Science of Gymnastics Strength Training. Dragon Door Publications.
2. Mark Hendricks (2021). Fundamentals of Marching Techniques. McGraw Hill Education.

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. https://youtu.be/jqxofPa1-uI
2. https://youtu.be/3AZKL_S4KI4

COURSE OUTCOMES:

CO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Demonstrate fundamental calisthenics exercises with proper techniques.	K3 (Applying)
CO2	Perform aerobics sequences to improve cardiovascular fitness and rhythm.	K4 (Analyzing)
CO3	Construct human pyramids with coordination, balance, and teamwork.	K5 (Evaluating)
CO4	Execute marching techniques with precision and discipline.	K3 (Applying)
CO5	Organize and conduct minor games for recreational and fitness purposes.	K4 (Analyzing)
CO6	Assess the effectiveness of these activities in physical education and sports training.	K6 (Creating)

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	9	9	3	0	0
CO2	9	1	3	1	3	0
CO3	3	3	1	3	9	1
CO4	3	3	9	3	0	0
CO5	9	9	3	9	3	1
CO6	1	0	1	3	3	9
Weightage	28%	25%	26%	23%	18%	11%

(9 - Strong, 3 - Moderate, 1-Low, 0 - No Contribution)

CO/K - Level	Level of Correlation

	High	Medium	Low	Zero
CO1/K1/K2	PO2,PO3	PO1,PO4	-	PO5,PO6
CO2/K2/K3	PO1	PO3,PO5	PO2,PO4	PO6
CO3/K3/K4	PO5	PO1,PO2,PO4	PO3,PO6	-
CO4/K4/K5	PO3	PO1,PO2,PO4	-	PO5,PO6
CO5/K5/K6	PO1,PO2,PO4	PO3,PO5	PO6	-
CO6/K6	PO6	PO4,PO5	PO3,PO1	PO2

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	**C1**	**C2**	**C3**	**Total Scholastic Marks C4**	**Non Scholastic Marks C4**	**CIA**	**% of Assessment**
	T1 4 Marks	**T2 10 Marks**	**Assignment 6 Marks**	**20 Marks**	**Attendance 5 Marks**	**25 Marks**	
K1	1	2	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	1	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	**4**	**10**	**6**	**20**	**5**	**25**	**100%**

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course in – charge **Signature of the HOD**

SEMESTER – I

Programme Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25APE1TP	Allied	Yoga &Gymnastics	Theory /Practical	6	**5**

COURSE DESCRIPTION:

This course provides hands-on training in yoga postures, pranayama techniques, and gymnastic movements to enhance flexibility, strength, and coordination. It emphasizes the scientific and practical aspects of body mechanics, breathing techniques, and mindfulness. Students will develop proficiency in executing asanas and gymnastic routines while understanding their physiological and psychological benefits.

COURSE OBJECTIVES:

- To develop flexibility, balance, and strength through yoga and gymnastics.
- To practice fundamental yoga postures and breathing techniques.
- To enhance motor coordination and agility with gymnastic movements.
- To improve body awareness and control in physical activities.
- To apply safety measures and injury prevention techniques in yoga and gymnastics.

UNIT - I: HISTORY OF YOGA & GYMNASTICS (15 hrs)

Introduction to Yoga and Gymnastics – Evolution – Global status - India – Tamil Nadu – Tournaments and Trophies.

UNIT- II - BASIC YOGIC PRACTICES - ASANAS (POSTURES) **(15 hrs)**

STANDING ASANAS: Tadasana, Trikonasana, Virabhadrasana - **SITTING ASANAS**: Padmasana, Paschimottanasana, Vajrasana - **SUPINE ASANAS**: Bhujangasana, Dhanurasana, Setu Bandhasana **INVERTED ASANAS**: Sarvangasana, Shirshasana - PRANAYAMA (Breathing Techniques) - Relaxation Techniques

UNIT- III- GYMNASTICS TYPES (15 hrs)

MAG-WAG-Aerobics-Acrobatics-Tumbling- Rhythmic Gymnastics

UNIT – IV – FUNDAMENTAL SKILLS IN GYMNASTICS (15 hrs)

Level – I Skills MAG– Floor, Vaulting, Parallel bar, Still Rings, Horizontal Bar , Pommel Horse

WAG – Floor, Vaulting Table, Floor Exercises, Balancing Beam, Uneven Bar

UNIT-V - PERFORMANCE AND EVALUATION (15 hrs)

Yoga Routine Performance (Asanas, Pranayama, Meditation) - Gymnastics Routine Performance (Floor & Apparatus) - Self-Assessment and Peer Review - Practical Examination and Skill Demonstration

TEXT BOOKS:

1. Ragul Prabu, (2023). Gymnastics Proficiency & cirtification programme (GPCP) : Text Book for Tamilnadu Gymnasts.
2. Luthra, A., Sharma, S. K., & Lau, S. K. (2024). Health & Wellness, Yoga Education, Sports and Fitness For FYUGP Students Semester 1: NEP 2020 Jharkhand Universities. S Chand Publishing. ISBN: 9789358704372.

Unit – I: Book 1: Level – I : Boys and Girls (Level I Pg No 12- 24)
Book 2: Chapter – I : Life and Yoga – Pg No 5
Unit – II: Book 1: Level – II : Boys and Girls (Pg No 26 – 32)
Unit – III: Book 1: Level – III : Boys and Girls (Pg No – 42-54)
Book: 2 Chapters – IV : Seated Asanas (PG No 95- 100)
Unit – IV: Book: 1 – Level IV – Boys and Girls Pg No 58 - 62
Unit – V : Level V – Boys and Girls (Pg No 55-65)
Book 2 – Title - Standing Asanas –Pg No 128

REFERECE BOOK(S):

1. Johnson, J., & Salmela, J. H. (2022). Coaching Gymnastics Successfully. Human Kinetics. ISBN: 9781718214030.
2. Alter, M. J. (2023). Science of Stretching: Stretching Theory, Techniques, and Practices for Improving Flexibility. Human Kinetics. ISBN: 9781718213842.

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. International Gymnastics Federation (FIG) – Rules, training materials, and official updates.https://www.gymnastics.sport
1. YouTube - Art of Living Yoga – Guided yoga and breathing techniques.
2. https://www.youtube.com/c/ArtofLiving

COURSE OUTCOMES:

CO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Understand the basic concepts and benefits of Yoga & Gymnastics.	K1 (Remembering)
CO2	Demonstrate fundamental asanas and gymnastic skills.	K2 (Understanding)
CO3	Assess individual flexibility, balance, and strength levels.	K3 (Applying)
CO4	Evaluate and refine techniques through self and peer assessments.	K4 (Analyzing)
CO5	Design personalized yoga and gymnastics routines.	K5 (Evaluating)
CO6	Design a personalized yoga program for different individuals.	K6 (Creating)

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	3	3	1
CO2	3	9	3	9	0	3
CO3	9	3	9	3	1	0
CO4	1	1	9	1	3	1
CO5	9	3	1	3	9	3
CO6	1	1	0	1	3	9
Weightage	**32%**	**20%**	**23%**	**20%**	**19%**	**16%**

(9 - Strong, 3 - Moderate, 1-Low, 0 - No Contribution)

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2,PO4,PO5	PO3,PO6	-

CO2/K2/K3	**PO2,PO4**	**PO1,PO3**	**PO3,PO6**	**PO5**
CO3/K3/K4	**PO1,PO3**	**PO2,PO4**	**PO5**	**-**
CO4/K4/K5	**PO3**	**PO5**	**PO1,PO2,PO4,PO6**	**-**
CO5/K5/K6	**PO1,PO5**	**PO2,PO4,PO6**	**PO3**	**-**
CO6/K6	**PO6**	**PO5**	**PO1,PO2,PO4**	**PO3**

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	**C1**	**C2**	**C3**	**Total Scholastic Marks C4**	**Non Scholastic Marks C4**	**CIA**	**% of Assessment**
	T1 4 Marks	**T2 10 Marks**	**Assignment 6 Marks**	**20 Marks**	**Attendance 5 Marks**	**25 Marks**	
K1	**1**	**1**	**1**	**3**		**3**	**12**
K2	**1**	**1**	**1**	**3**		**3**	**12**
K3	**1**	**2**	**1**	**4**		**4**	**16**
K4	**1**	**2**	**1**	**4**		**4**	**16**
K5	**-**	**2**	**1**	**3**		**3**	**12**
K6	**-**	**2**	**1**	**3**		**3**	**12**
Non Scholastic	**-**	**-**	**-**	**-**		**5**	**20**
Total	**4**	**10**	**6**	**20**	**5**	**25**	**100%**

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – II

Programme	**Course**	**Course**	**Course Title**	**Category**	**Hrs/**	**Credits**

Code	Code	Type			Week	
PEUS	U25PE3TP	Core	Rules, Officiating and Coaching - Track Events	Theory/Practical	6	**5**

COURSE DESCRIPTION:

This course provides an in-depth understanding of the rules, regulations, and officiating procedures for track events. Students will gain practical exposure to sprinting, middle-distance, long-distance, hurdles, and relay races while learning event-specific techniques, common faults, and corrective measures. The course also emphasizes the role of training methodologies, performance analysis, and sports technology in track events.

COURSE OBJECTIVES:

- Demonstrate knowledge of track event classifications, rules, and regulations.
- Apply proper techniques and strategies in sprint, middle-distance, and long-distance events.
- Analyze biomechanical and physiological factors influencing performance in track events.
- Evaluate officiating rules, track markings, and electronic timing methods.
- Implement training methods and corrective techniques for improved athletic performance.

UNIT - I: INTRODUCTION TO TRACK EVENTS (15 hrs)

History and evolution of track events - Classification of track events: Sprints, middle-distance, and long-distance races - Track markings, measurements, and layout

UNIT- II – SPRINT EVENTS (15 hrs)

Rules and regulations for 100m, 200m, and 400m races - Starting techniques: Crouch and standing start - Sprint mechanics: Acceleration, stride length, and frequency

UNIT- III- MIDDLE AND LONG-DISTANCE EVENTS (15 hrs)

Rules and regulations for 800m, 1500m, 5000m, and 10000m races - Strategies for pacing and endurance building - Common faults and corrective measures

UNIT – IV – HURDLES AND RELAY RACES (15 hrs)

Rules and regulations for 110m hurdles (men), 100m hurdles (women), and 400m hurdles - Techniques for hurdle clearance and rhythm training - Relay events: 4x100m and 4x400m – Baton exchange and strategies - Disqualifications and common mistakes in relays

UNIT-V – OFFICIATING & TRAINING (15 hrs)

Responsibilities of officials in track events - Timing systems and methods (manual and electronic) - Role of sports technology in improving track event performance

TEXT BOOKS:

1. Parker, R. (2023). Track and field fundamentals: Techniques, training, and performance (3rd ed.). Routledge.
2. Walker, J. (2022). Advanced track and field: Coaching strategies and biomechanics (2nd ed.). Human Kinetics.

Unit – I: Book 1: Chapters – 1 - History and evolution of track events (Pg No 10-15)

Book 2: Chapter – 1 - Track markings, measurements, and layout (Pg No 20-35)

Unit – II: Book 1: Chapters – 2 & 3 - 100m, 200m, and 400m races (Pg No 45-56)

Book 2: Chapter –3- Starting techniques: Crouch and standing start (Pg no 35-43)

Unit – III: Book 1: Chapter – 4 - Rules and regulations (Ppg No 23-45)

Book: 2 Chapter – 5 - Techniques for hurdle clearance (Pg no 65-73)

Unit – IV: Book: 1 Chapters – 5 - Responsibilities of officials (Pg No 34-45)

Book :2 Chapter – 7- Relay events: 4x100m and 4x400m (Pg No 23-34)

Unit: V: Book: 1 Chapters – 6 & 7 - Responsibilities of officials in track events

Book :2 Chapters – 7 & 8 -Timing systems and methods (manual and electronic)

REFERECE BOOK(S):

1. Schmolinsky, G. (2022). Track and field: The science of athletics training and performance (4th ed.). Springer.
2. Bartonietz, K., & Wild, G. (2021). Biomechanics and coaching in track and field (2nd ed.). Human Kinetics.

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. https://www.tnpesu.org/pdf/LMS_AMS_Study_material_for_UGPG/DEPARTMENT_OF_PHYSICAL_EDUCATION/20f.pdf?utm_source=chatgpt.com
2. https://www.nfhs.org/media/6892897/nfhs-track-and-field-pre-meet-notes_2023_final.pdf?utm_source=chatgpt.com

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Understand the fundamental rules and regulations of track events as per World Athletics standards.	K1- Recall
CO2	Explain the technical aspects, including starting procedures, lane discipline, and event-specific regulations.	K2 – Understand
CO3	Apply track event rules and regulations in officiating and coaching scenarios.	K3 - Apply
CO4	Analyze performance techniques, officiating errors, and event management strategies.	K4 - Analysis
CO5	Evaluate athlete performances based on track event regulations and suggest improvements.	K5 - Evaluate
CO6	Design and implement officiating plans and event organization strategies for track competitions.	K6 - Create

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	0	0	0
CO2	3	9	3	1	0	0
CO3	1	3	9	3	1	0
CO4	0	1	3	9	3	0
CO5	0	0	1	3	9	3
CO6	0	0	1	1	3	9
Weightage	14.13%	17.39%	18.48%	17.39%	17.39%	15.22%

(9 - Strong, 3 - Moderate, 1-Low, 0 - No Contribution)

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO

CO1/K1/K2	**PO1**	**PO2**	**PO3**	**PO4,PO5,PO6**
CO2/K2/K3	**PO2**	**PO1,PO3**	**PO4**	**PO5**
CO3/K3/K4	**PO3**	**PO2,PO4**	**PO1,PO5**	**PO6**
CO4/K4/K5	**PO4**	**PO3,PO5**	**PO2**	**PO1,PO6**
CO5/K5/K6	**PO5**	**PO4,PO6**	**PO3**	**PO1**
CO6/K6	**PO6**	**PO5**	**PO3,PO4**	**PO1**

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	**C1**	**C2**	**C3**	**Total Scholastic Marks C4**	**Non Scholastic Marks C4**	**CIA**	**% of Assessment**
	T1 4 Marks	**T2 10 Marks**	**Assignment 6 Marks**	**20 Marks**	**Attendance 5 Marks**	**25 Marks**	
K1//K2	**1**	**1**	**1**	**3**		**3**	**12**
K2/K3	**1**	**1**	**1**	**3**		**3**	**12**
K3/K4	**1**	**2**	**1**	**4**		**4**	**16**
K4/K5	**1**	**2**	**1**	**4**		**4**	**16**
K5/K6	**-**	**2**	**1**	**3**		**3**	**12**
K6	**-**	**2**	**1**	**3**		**3**	**12**
Non Scholastic	**-**	**-**	**-**	**-**		**5**	**20**
Total	**4**	**10**	**6**	**20**	**5**	**25**	**100%**

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – II

Programme Code	**Course Code**	**Course Type**	**Course Title**	**Category**	**Hrs/ Week**	**Credits**

PEUS	U25APE2	Allied	Anatomy and Physiology	Theory	3	**3**

COURSE DESCRIPTION:

This course provides an in-depth understanding of human anatomy and physiology, focusing on the structure and function of major organ systems. It covers the musculoskeletal, cardiovascular, respiratory, nervous, and endocrine systems, emphasizing their roles in physical activity and sports performance. The course aims to enhance students' knowledge of body mechanics, energy metabolism, and physiological adaptations to exercise.

COURSE OBJECTIVES:

- Identify the basic structure and functions of human body systems related to physical activity.
- Explain the physiological mechanisms behind movement, respiration, circulation, and neural control.
- Analyze the effects of exercise on different physiological systems and their adaptations.
- Apply anatomical and physiological concepts to sports, fitness, and rehabilitation programs.
- Evaluate the importance of physiological assessments in monitoring athletic performance and health.

UNIT - I: INTRODUCTION TO ANATOMY AND PHYSIOLOGY (9Hrs)

Meaning and Scope of Anatomy and Physiology in Physical Education - Importance of Anatomy and Physiology in Sports and Exercise -Cell: Structure and Functions -Tissues: Types and Functions - Muscular System: Types of Muscles – Skeletal Muscle, Cardiac Muscle, and Smooth Muscle.

UNIT- II – SKELETAL SYSTEM (9Hrs)

Meaning and Functions of the Skeletal System - Bones: Classification and Functions - General Features of Various Bones: Vertebral Column, Pelvic Bone, Radius and Ulna, Scapula, Femur, and Bones of the Skull - Joints: Definition and Classification

UNIT- III- NERVOUS AND DIGESTIVE SYSTEMS (9Hrs)

Nervous System: Neuron: Structure and Functions - Central Nervous System (CNS): Brain and Spinal Cord - Peripheral Nervous System (PNS): Cranial Nerves and Spinal Nerves
Digestive System:Structure and Functions - Digestive Process - Role of Liver and Pancreas

UNIT – IV – RESPIRATORY AND CIRCULATORY SYSTEMS (9Hrs)

Respiratory System: Meaning and Process of Respiration - Respiratory Tract – Alveoli – Lungs: Structure and Functions - Gas Exchange and Vital Capacity -Circulatory System: Structure and Functions of the Heart -Cardiac Cycle, Cardiac Output, and Stroke Volume.

UNIT-V – ENDOCRINE SYSTEM (9Hrs)

Endocrine Glands and their Functions: Pituitary, Thyroid, Parathyroid, Thymus, Pancreas, Adrenal, and Sex Glands - Role of Endocrine Glands in Growth, Development, and Regulation of Body Functions

TEXT BOOKS:

1. Swaminathan, M. (2023). Essentials of Anatomy and Physiology for Physical Education. New Delhi, India: Jaypee Brothers Medical Publishers.

2. Tortora, G. J., & Derrickson, B. (2022). Principles of Anatomy and Physiology (16th ed.). Hoboken, NJ: Wiley.

Unit – I: Book 1: Content – 1 – Introduction (Pg No 11-15)
Book 2: Chapter – 1 - Cell: Structure and Functions (Pg No 20-35)
Unit – II: Book 1: Content – 2.1& 2.3 –Skeletal System (Pg No 35-45)
Book 2: Chapter –3- Joints: Definition and Classification (Pg no 35-43)
Unit – III: Book 1: Content – 4.1 - Neuron: Structure and Functions (Pg No 28-35)
Book: 2 Chapter – 5 - Digestive Systems: (Pg no 72-80)
Unit – IV: Book: 1 Content – 5.1- Respiratory System (Pg No 42-46)
Book :2 Chapter – 7- Circulatory System (Pg No 42-44)
Unit: V: Book: 1Content – 6.3 - Endocrine Glands and their Functions (pg no 25-29)
Book :2 Chapters – 6 - Regulation of Body Functions (41-52)

REFERECE BOOK(S):

1. Hall, J. E. (2021). Guyton and Hall Textbook of Medical Physiology (14th ed.). Elsevier.
2. Marieb, E. N., & Hoehn, K. (2023). Human Anatomy & Physiology (12th ed.). Pearson

DIGITAL OPEN EDUCATIONAL RESOURCES:

- https://www.khanacademy.org/science/health-and-medicine
- https://openstax.org/details/books/anatomy-and-physiology

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Understand the fundamental concepts of human anatomy and physiology, including the structure and functions of cells, tissues, and the muscular system.	K1 – Remembering, K2 – Understanding
CO2	Explain the skeletal system, its classification, functions, and the structure of major bones and joints.	K2 – Understanding, K3 – Applying
CO3	Analyze the nervous and digestive systems, explaining their structures, functions, and physiological processes.	K3 – Applying, K4 – Analyzing
CO4	Evaluate the respiratory and circulatory systems, focusing on respiration, gas exchange, cardiac function, and circulation.	K4 – Analyzing, K5 – Evaluating
CO5	Assess the role of endocrine glands and their impact on body growth, development, and regulatory functions.	K5 – Evaluating, K6 – Creating
CO6	Apply anatomical and physiological knowledge in sports science	K6 - Create

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	0	0	0
CO2	3	9	3	1	0	0
CO3	1	3	9	3	1	0
CO4	0	1	3	9	3	0
CO5	0	0	1	3	9	3
CO6	1	0	0	1	3	9

Weightage	21.67%	26.67%	28.33%	28.33%	26.67%	23.33%

(9 - Strong, 3 - Moderate, 1-Low, 0 - No Contribution)

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2	PO3	PO4,PO5,PO6
CO2/K2/K3	PO2	PO1,PO3	PO4	PO5
CO3/K3/K4	PO3	PO2,PO4	PO1,PO5	PO6
CO4/K4/K5	PO4	PO3,PO5	PO2	PO1,PO6
CO5/K5/K6	PO5	PO4,PO6	PO3	PO1
CO6/K6	PO6	PO5	PO3,PO4	PO1

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – II
For who joined from 2025 onwards

Programme Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25APE3TP	Allied	Rules, Officiating & Coaching - Field Events	Theory/Practical	6	**5**

COURSE DESCRIPTION:

This course provides an in-depth understanding of the rules and regulations governing various field events in athletics. Students will gain hands-on experience in officiating, measurement techniques, and event management. The course also emphasizes skill development, fair play, and technical accuracy in field events such as jumps and throws.

COURSE OBJECTIVES:

- Understand and apply the official rules and regulations of field events.
- Demonstrate proper techniques for officiating and judging field events.
- Perform accurate measurement techniques for jumps and throws.
- Analyze and correct errors in field event performances.
- Manage and organize field events in a competitive setting.

UNIT - I: INTRODUCTION TO FIELD EVENTS (15 hrs)

Definition and classification of field events - Importance of rules and regulations in athletics - General officiating principles for field events.

UNIT- II – JUMPING EVENTS (15 hrs)

Rules, techniques, and measurements for: Long Jump - Triple Jump - High Jump - Pole Vault - Common fouls and error rectification

UNIT- III- THROWING EVENTS (15 hrs)

Rules, techniques, and measurements for: Shot Put - Discus Throw - Javelin Throw - Hammer Throw - Proper grip, stance, and release techniques

UNIT – IV – OFFICIATING AND EVENT MANAGEMENT (15 hrs)

Responsibilities of officials in field events - Recording results and resolving disputes - Use of technology in officiating and measurement

UNIT-V – PRACTICAL APPLICATIONS AND TESTING (15 hrs)

Live officiating practice - Conducting and managing inter-college or intra-college field events - Evaluation of performance based on official rules

TEXT BOOKS:

1. Foster, C., & James, N. (2023). Athletics: Rules, Techniques, and Officiating. Springer.
2. Morrison, D. (2022). Track and Field Officiating Handbook: Rules and Regulations for Jumps and Throws. Human Kinetics.

Unit – I: Book 1: Chapter 1: Section 1:1, 1:2 Chapter II: Section 2.3, 2.4
Book 2: Chapter I : Section 2.1,2.3 Chapter III:Section 3.1,3.4,3.9
Unit – II: Book 1: Chapter II: Section 2.1,2.3 Chapter IV:4.8,4.3
Book 2: Chapter III Section 3.7, 3.8

Unit – III: Book 1: Chapter –III: Section 3.5, 3.6 Chapter IV 4.4
Book: 2 Chapters – IV Section 4.9, 4.10 Chapter V:5.3,5.6
Unit – IV: Book: 1 Chapter-V Section 5.1,5.2
Book :2 Chapter –VI Section 6.1,6.7
Unit: V: Book: 1 Chapter – VII Section 7.2, 7.4 Chapter VIII- 8.1,8.2
Book :2 Chapter –X- Section 10.1,10.7

REFERECE BOOK(S):

1. Parker, T., & Williams, R. (2023). Fundamentals of Track and Field: Rules, Techniques, and Training. Human Kinetics.
2. Smith, J. (2022). The Complete Guide to Field Events: Rules, Strategies, and Performance Techniques. Routledge.

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. https://www.worldathletics.org/about-iaaf/documents/technical
2. https://us.humankinetics.com/collections/track-field
3. https://coachtube.com/categories/track-and-field

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Understand the fundamental rules and regulations of field events.	K1 – Knowledge
CO2	Explain the technical aspects and officiating procedures in field events.	K2 – Comprehension
CO3	Apply knowledge of field event techniques in practice and competition scenarios.	K3 – Application
CO4	Analyze common errors and suggest corrections for improved performance in field events.	K4 – Analyzing
CO5	Evaluate athlete performances based on competition regulations and scoring criteria.	K5 – Evaluating
CO6	Create structured training plans incorporating proper rules and techniques for field events.	K6 - Create

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	0	0	0
CO2	3	9	3	1	0	0
CO3	1	3	9	3	1	0
CO4	0	1	3	9	3	1
CO5	0	0	1	3	9	3
CO6	0	0	0	1	3	9
Weightage	13%	16%	17%	17%	16%	16%

(9 - Strong, 3 - Moderate, 1-Low, 0 - No Contribution)

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2	PO3	PO4,PO5,PO6

CO2/K2/K3	**PO2**	**PO1,PO3**	**PO4**	**PO5**
CO3/K3/K4	**PO3**	**PO2,PO4**	**PO1,PO5**	**PO6**
CO4/K4/K5	**PO4**	**PO3,PO5**	**PO2**	**PO1,PO6**
CO5/K5/K6	**PO5**	**PO4,PO6**	**PO3**	**PO1**
CO6/K6	**PO6**	**PO5**	**PO3,PO4**	**PO1**

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	**C1**	**C2**	**C3**	**Total Scholastic Marks C4**	**Non Scholastic Marks C4**	**CIA**	**% of Assessment**
	T1 4 Marks	**T2 10 Marks**	**Assignment 6 Marks**	**20 Marks**	**Attendance 5 Marks**	**25 Marks**	
K1	**1**	**1**	**1**	**3**		**3**	**12**
K2	**1**	**1**	**1**	**3**		**3**	**12**
K3	**1**	**2**	**1**	**4**		**4**	**16**
K4	**1**	**2**	**1**	**4**		**4**	**16**
K5	**-**	**2**	**1**	**3**		**3**	**12**
K6	**-**	**2**	**1**	**3**		**3**	**12**
Non Scholastic	**-**	**-**	**-**	**-**		**5**	**20**
Total	**4**	**10**	**6**	**20**	**5**	**25**	**100%**

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – III
For who joined from 2025 onwards

Prog Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25PE4TP	Core	Rules, Officiating and Coaching - Cricket & Football	Theory/ Practical	6	**5**

COURSE DESCRIPTION:

This course provides practical knowledge and skill development in Cricket and Football, focusing on fundamental techniques, advanced strategies, officiating rules, and match practice. The course aims to enhance students' playing ability, tactical understanding, and officiating competency in both sports.

COURSE OBJECTIVES:

- Develop fundamental technical skills in Cricket and Football, including batting, bowling, passing, shooting, and goalkeeping.
- Provide a thorough understanding of the rules and regulations governing Cricket and Football as per MCC and FIFA standards.
- Enhance students' ability to analyze game situations and implement strategies for effective gameplay.
- Train students in officiating techniques, including umpiring, refereeing signals, and match decision-making.
- Foster team coordination, leadership, and sportsmanship through match practice and tournament organization.

UNIT - I: FUNDAMENTAL SKILLS IN CRICKET (12 Hrs)

Batting Techniques: Forward & Backward Defense, Drives, Cuts, Pull, and Sweep Shots -Bowling Techniques: Fast, Medium, and Spin Bowling -Fielding Skills: Catching, Throwing, and Wicket-keeping -Running between Wickets and Game Strategies

UNIT- II – RULES & REGULATIONS OF CRICKET (12 Hrs)

Laws of Cricket (MCC Rules) -Umpiring Signals & Decision-making -Match Formats: Test, ODI, T20 -Cricket Match Practice & Strategies

UNIT – III – FUNDAMENTAL SKILLS IN FOOTBALL (12 Hrs)

Passing, Dribbling, Shooting, and Heading Techniques - •Offensive & Defensive Strategies -Goalkeeping Techniques -•Set Plays: Free Kicks, Corners, and Penalty Kicks

UNIT-IV – RULES & REGULATIONS OF FOOTBALL (12 Hrs)

FIFA Laws of the Game -Officiating and Refereeing Signals -Match Format and Tactical Formations -Football Match Practice & Tactical Implementation

UNIT-V – OFFICIATING AND MATCH PRACTICE (12 Hrs)

Practical Officiating in Cricket and Football - Conducting Intra-College Competitions -Performance Evaluation and Skill Assessment -Match Situations and Decision-Making Practice

TEXT BOOKS:

1. Ramaswamy, N. (2023). Fundamentals of Cricket: Techniques, Tactics, and Training. Sports Publications.
2. Sharma, A. (2022). Modern Football Coaching and Tactics: A Scientific Approach. Khel Sahitya Kendra.

Unit – I: Book 1: Fundamental Skills (Pg No 10-15)
Book 2: Game Strategies (Pg No 12-15)
Unit – II: Book 1: Laws Cricket (Pg No 25-29)
Book 2: Performance Enhancement (Pg No 25-30)
Unit – III: Book 1: Offensive & Defensive Strategies (Pg No 35-39)
Book: 2 Offensive and defensive skills (Pg No 35-39)
Unit – IV: Book: 1 FIFA Laws of the Game (Pg No 28-35)
Book :2 Match Format and Tactical Formations (Pg No 42-50)
Unit: V: Book: 1 Officiating Practice (Pg No 51-56)
Book :2 Performance evolution (Pg No 70-83)

REFERECE BOOK(S):

1. Hughes, M., & Franks, I. M. (2023). The Essentials of Performance Analysis in Sport: Cricket and Football Perspectives. Routledge.
2. Wilson, G. (2022). Advanced Coaching Strategies for Football and Cricket: A Practical Guide. Human Kinetics.

DIGITAL OPEN EDUCATIONAL RESOURCES:

- https://www.fifatrainingcentre.com
  https://www.icc-cricket.com/about/coaching
  https://www.youtube.com/user/ecbcricket

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Recall basic rules, terminologies, and history of Cricket and Football.	K1 – Remembering
CO2	Explain concepts, techniques, and strategies of both sports.	K2 – Understanding
CO3	Implement learned skills in real-game situations.	K3 – Application
CO4	Evaluate player performance, team formations, and officiating decisions using practical applications.	K4 – Analyzing
CO5	Evaluate performance, strategies, and errors.	K5 – Evaluating
CO6	Assess team and player performance based on criteria.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	0	0	0
CO2	3	9	9	1	9	0
CO3	1	3	9	3	1	0
CO4	3	1	3	9	3	1
CO5	1	1	1	3	9	3
CO6	1	1	0	1	3	9
Weightage	15.79	15.79%	20.18%	14.91%	21.93%	11.40%

(9 - Strong, 3 - Moderate, 1-Low, 0 - No Contribution)

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2	PO3	PO4,PO5,PO6
CO2/K2/K3	PO2,PO3,PO5	PO1	PO4	PO5
CO3/K3/K4	PO3	PO2,PO4	PO1,PO5	PO6
CO4/K4/K5	PO4	PO3,PO5	PO2,PO6	PO1
CO5/K5/K6	PO5	PO4,PO6	PO1,PO2,PO3	-
CO6/K6	PO6	PO5	PO1,PO3,PO4	-

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – III

For who joined from 2025 onwards

Prog Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25APE4	Allied	Kinesiology & Biomechanics	Theory	3	4

COURSE DESCRIPTION:

This course provides an in-depth understanding of kinesiology and biomechanics in human movement. It explores the mechanical and anatomical principles affecting physical activity, sports performance, and injury prevention. The course covers joint structure, muscle function, motion analysis, and biomechanical applications in sports and rehabilitation.

COURSE OBJECTIVES:

- Understand the fundamental principles of kinesiology and biomechanics and their applications in sports and physical activities.
- Analyze joint movements and muscle functions to enhance performance and prevent injuries.
- Apply biomechanical principles to improve posture, gait, and movement efficiency in various sports.
- Evaluate sports techniques using biomechanical tools and technologies for better performance optimization.
- Implement corrective strategies for postural deviations and injury prevention based on biomechanical assessment.

UNIT - I: INTRODUCTION TO KINESIOLOGY & BIOMECHANICS (9 HOURS)

Definition, Scope, and Importance of Kinesiology and Biomechanics - Relationship between Kinesiology, Biomechanics, and Physical Education - Fundamental Concepts: Planes, Axes, and Types of Motion - Basic Mechanical Principles: Force, Gravity, Equilibrium and Friction

UNIT- II – JOINT MOVEMENTS AND MUSCULAR ANALYSIS (9 HOURS)

Types of Joints and Joint Movements - Structural and Functional Classification of Muscles - Types of Muscle Contractions: Isotonic, Isometric, and Isokinetic - Role of Muscles in Human Movement

UNIT – III – BIOMECHANICAL PRINCIPLES IN HUMAN MOVEMENT (9 HOURS)

Newton's Laws of Motion and their Applications in Sports - Levers: Types and Applications in Sports Movements - Principles of Projectile Motion and Stability - Fluid Mechanics in Sports Performance.

UNIT-IV – POSTURE AND GAIT ANALYSIS (9 HOURS)

Postural Assessment: Correct and Faulty Postures - Common Postural Deviations and Their Correction - Gait Cycle: Phases and Biomechanical Analysis - Clinical Gait Analysis in Sports and Rehabilitation.

UNIT-V – BIOMECHANICS IN SPORTS AND INJURY PREVENTION (9 HOURS)

Biomechanics of Running, Jumping, and Throwing - Analysis of Force Application in Sports Skills - Biomechanics of Injury and Injury Prevention Strategies - Technological Advances in Biomechanical Analysis (Force Plates, Motion Capture)

TEXT BOOKS:

- Bartlett, R. (2019). Introduction to sports biomechanics: Analysing human movement patterns (2nd ed.). Routledge.
- McGinnis, P. M. (2020). Biomechanics of sport and exercise (4th ed.). Human Kinetics.

Unit – I: Book 1: Importance od Phy Edu (Pg No 10-20)
Book 2: sports science and physical education (Pg No 13-19)
Unit – II: Book 1: biomechanical concepts (Pg No 20-29)
Book 2: theory and practice in biomechanics (Pg No 25-30)
Unit – III: Book 1: movement analysis (Pg No 35-45)
Book: 2 advancements in motion analysis (Pg No 37-42)
Unit – IV: Book: 1 understanding of how biomechanics (Pg No 56-66)
Book :2 explanations and practical examples (Pg No 48-50)
Unit: V: Book: 1 sports performance and injury prevention (Pg No 95-100)
Book :2 in-depth understanding of biomechanics. (Pg No 65-70)

REFERECE BOOK(S):

1. Bartlett, R. (2019). Introduction to sports biomechanics: Analysing human movement patterns (2nd ed.). Routledge.
2. McGinnis, P. M. (2020). Biomechanics of sport and exercise (4th ed.). Human Kinetics.

DIGITAL OPEN EDUCATIONAL RESOURCES:

- Kinesiology and Biomechanics Course – MIT Open CourseWare: https://ocw.mit.edu
- Biomechanics in Sports – National Library of Medicine: https://www.ncbi.nlm.nih.gov
- Online Biomechanics Videos – Khan Academy: https://www.khanacademy.org

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Explain the fundamental principles of kinesiology and biomechanics in human movement.	K1 – Remembering
CO2	Analyze muscle actions and joint movements in various physical activities.	K2 – Understanding
CO3	Apply biomechanical principles to improve sports performance and movement efficiency.	K3 – Application
CO4	Assess posture and gait patterns for movement correction and injury prevention.	K4 – Analyzing
CO5	Demonstrate knowledge of biomechanical applications in rehabilitation and sports.	K5 – Evaluating
CO6	Utilize modern biomechanical tools and techniques for motion analysis.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	0	3	0
CO2	3	9	9	1	9	0
CO3	1	3	9	1	1	0
CO4	9	1	3	9	3	1
CO5	1	3	1	3	9	3
CO6	3	1	0	1	3	3
Weightage	21.85%	16.81%	19.33%	12.61%	23.53%	5.88%

(9 - Strong, 3 - Moderate, 1-Low, 0 - No Contribution)

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2	PO3	PO4,PO5,PO6
CO2/K2/K3	PO2,PO3,PO5	PO1	PO4	PO5
CO3/K3/K4	PO3	PO2,PO4	PO1,PO5	PO6
CO4/K4/K5	PO4	PO3,PO5	PO2,PO6	PO1
CO5/K5/K6	PO5	PO4,PO6	PO1,PO2,PO3	-
CO6/K6	-	PO5	PO1,PO3,PO4	-

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – III

For who joined from 2025 onwards

Programe Code	Course Code	Course Title	Category	Hrs/Week	Credits
PEUS	U25APE5TP	Rules, Officiating and Coaching Handball & Volleyball	Allied Practical	6	5

COURSE DESCRIPTION:

This course provides a comprehensive practical understanding of Handball and Volleyball, covering fundamental techniques, game strategies, officiating, and performance evaluation. It aims to develop students' skills, tactical knowledge, and officiating ability, ensuring they acquire a strong foundation in both sports.

COURSE OBJECTIVES:

- Develop fundamental and advanced skills in Handball and Volleyball.
- Understand the rules, regulations, and officiating procedures for both sports.
- Apply game strategies and tactics in competitive scenarios.
- Improve physical fitness through sport-specific drills and training.
- Develop leadership and teamwork skills through gameplay and officiating.

UNIT - I: INTRODUCTION TO HANDBALL AND VOLLEYBALL (12 hrs)

History and development of Handball and Volleyball - Basic rules, regulations, and safety measures - Overview of playing area, equipment, and scoring system

UNIT- II – SKILLS AND TECHNIQUES IN HANDBALL (12 hrs)

Passing and catching techniques - Dribbling and shooting techniques - Offensive and defensive formations - Goalkeeping skills and training methods

UNIT – III – SKILLS AND TECHNIQUES IN VOLLEYBALL (12 hrs)

Forearm pass, overhead pass, and serving techniques - Spiking and blocking techniques - Defensive and offensive formations - Role of libero and rotational positions

UNIT-IV – OFFICIATING AND MATCH CONDUCT (12 hrs)

Handball: Roles and responsibilities of referees and officials - Volleyball: Signals, scoring system, and referee's duties - Conducting tournaments and handling disputes - Use of technology in officiating.

UNIT-V – PRACTICAL APPLICATIONS AND GAME PLAY (12 hrs)

Practice sessions focusing on skill improvement - Simulation of game scenarios for strategic application - Officiating practice and match analysis - Fitness training and injury prevention.

TEXT BOOKS:

1. Ghosh, S. (2023). Hockey: Techniques, tactics, and training (2nd ed.). Sports Publications.
2. Williams, M. (2023). Volleyball: A complete guide for players and coaches (3rd ed.). Human Kinetics.

Unit – I: Book 1: Introduction to Handball (Pg No 15-20)

Book 2: Understanding Volleyball (Pg No 10-21)

Unit – II: Book 1: Fundamentals of Handball Skills (Pg No 25-30)

Book 2: Basic Skills and Techniques (Pg No 18-23)

Unit – III: Book 1: Tactical Play and Strategies (Pg No 32-36)

Book: 2 Tactical Aspects of Volleyball (Pg No 36-40)

Unit – IV: Book: 1 Handball Training and Conditioning (Pg No 45-48)

Book: 2 Strength and Conditioning for Volleyball Players (Pg No 41-49)

Unit: V: Book: 1 Advanced Techniques and Modern Trends (Pg No 50-60)

Book: Coaching Philosophy and Team Management. (Pg No 61-75)

REFERECE BOOK(S):

- Grice, T. (2022). Coaching volleyball successfully (2nd ed.). Human Kinetics.
- Hassan, R. (2021). Advanced Handball coaching: Modern techniques and strategies (1st ed.). Routledge.

DIGITAL OPEN EDUCATIONAL RESOURCES:

- International Handball Federation (IHF) – Official rules, training materials, and coaching guides.
  https://www.ihf.info
- Fédération Internationale de Volleyball (FIVB) – Official rulebook, coaching materials, and tournament updates. https://www.fivb.com

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Demonstrate proficiency in the fundamental skills of Handball and Volleyball.	K1 – Remembering
CO2	Apply the rules and regulations effectively during matches and officiating.	K2 – Understanding
CO3	Execute tactical and strategic gameplay in both sports.	K3 – Application
CO4	Comparing offensive and defensive strategies in both sports.	K4 – Analyzing
CO5	Assess performance and provide corrective measures for skill improvement.	K5 – Evaluating
CO6	Designing a training session to enhance team performance.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	1	9	0	3	0
CO2	1	9	3	1	1	0
CO3	9	3	9	3	1	0
CO4	3	1	3	9	3	1
CO5	1	9	1	3	3	1
CO6	3	1	0	1	3	3
Weightage	20	24	25	18	14	5

(9 - Strong, 3 - Moderate, 1-Low, 0 - No Contribution)

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO3	PO1,PO5	PO2	PO4,PO6
CO2/K2/K3	PO2	PO3	PO1,PO4,PO5	-
CO3/K3/K4	PO1,PO3	PO2,PO4	PO5	PO6
CO4/K4/K5	PO4	PO1,PO3,PO5	PO2,PO6	-
CO5/K5/K6	PO2	PO4,PO5	PO1,PO3,PO6	-
CO6/K6	-	PO1,PO5,PO6	PO3,PO4	PO3

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – IV

For who joined from 2025 onwards

Prog Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25PE5TP	Core	Rules, Officiating and coaching - Table Tennis & Ball Badminton	Theory/Practical	6	**5**

COURSE DESCRIPTION:

This course provides students with the opportunity to develop their skills in Table Tennis and Ball Badminton. These are fast-paced, team-oriented sports that require agility, coordination, reflexes, and strategic thinking. Through practical sessions, students will learn the fundamental techniques, rules, and strategies of both sports. The course is designed to enhance physical fitness, teamwork, and tactical awareness, ensuring that students develop both theoretical knowledge and practical competence.

COURSE OBJECTIVES:

- Demonstrate the basic and advanced techniques in Table Tennis and Ball Badminton.
- Apply effective strategies in both individual and team sports.
- Improve physical fitness, including speed, coordination, and reflexes, through specific drills and exercises.
- Understand the rules and regulations governing Table Tennis and Ball Badminton.
- Build teamwork, communication, and leadership skills through cooperative gameplay.
- Develop critical thinking and decision-making skills in real-game situations.

UNIT - I: INTRODUCTION TO TABLE TENNIS (12hrs)

History and Evolution of Table Tennis - Basic Equipment: Table, Racket, and Ball - Rules and Scoring System - Basic Techniques: Grip: Forehand and Backhand - Stance and Footwork - Serve: Types of serves (short, long, spin) - Introduction to the Court Layout.

UNIT – II – BALL BADMINTON BASICS (12hrs)

History and Evolution of Ball Badminton - Basic Equipment: Ball, Racket, Net - Rules and Scoring System - Basic Techniques: Serve: Types of serves (high, low, short) - Passing and Receiving: Proper positioning and techniques - Hand-Eye Coordination: Basic ball control and positioning.

UNIT-III – ADVANCED TECHNIQUES IN TABLE TENNIS (12hrs)

Spin techniques: topspin, backspin, and sidespin - Advanced serve techniques: spin serve and flick serve - Footwork and movement: Moving to the ball, side-to-side, advancing and retreating
Defensive and offensive techniques: Block, counter-hit, and smashes.

UNIT-IV – ADVANCED TECHNIQUES IN BALL BADMINTON (12hrs)

Advanced Skills: Smash: Power and technique - Net Play: Soft returns, short flick shots - Jump Shots: How to jump and smash effectively - Positioning and Movement: Court positioning for singles and doubles - Anticipation and reading the opponent's game -Defensive and Offensive Strategies: Setting up for a smash, counter-attacking.

UNIT-V – TOURNAMENT PLAY, EVALUATION, AND FEEDBACK (12HRS)

Organizing and participating in a Mini Tournament - Rules and Etiquette of Competition - Evaluation of Performance: Self-assessment and peer evaluation - Analyzing strengths and areas of improvement - Strategies for Improvement: -Game analysis, tips for further development in both sports

Assessment:

- Practical Exams: Skill demonstration, technique assessment, and game play performance
- Theory Exam: Brief written test on rules, history, and techniques
- Project/Assignment: Creating a personal development plan for improving skills in both sports

TEXT BOOKS:

1. Table Tennis: Skills, Techniques, Tactics" by Peter A. Martin
2. "Ball Badminton: A Complete Guide" by Ramesh Chandra

Unit – I: Book 1: Introduction to Table Tennis (Pages X-Y)
Book 2: Introduction to Ball Badminton (Pages X-Y)
Unit – II: Book 1: Basic Techniques (Pages Y-Z)
Book 2: Basic Skills in Ball Badminton (Pages Y-Z)
Unit – III: Book 1: Serving and Return Techniques (Pages A-B)
Book: 2 Advanced Skills and Techniques (Pages A-B)
Unit – IV: Book: 1 Spin Techniques (Pages C-D)
Book :2 Game Strategies and Positioning (Pages C-D)
Unit: V: Book: 1 Footwork and Movement (Pages E-F)
Book :2 Fitness for Ball Badminton. (Pg Pages E-F)

REFERECE BOOK(S):

1. The Art of Table Tennis" by Alfred K. Bower
2. "Modern Ball Badminton" by S. S. Ramesh
3. "Sports Science: A Multidisciplinary Approach" by N. M. R. Iyer

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. Ball Badminton Federation of India (BBFI) Website: http://www.ballbadminton.in
2. International Table Tennis Federation (ITTF) Website: https://www.ittf.com

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Demonstrate an understanding of core concepts in physical education, sports science, and fitness, and apply this knowledge in real-world situations.	K1 – Remembering
CO2	Develop the ability to perform practical activities in various sports, demonstrating proficiency and technical expertise.	K2 – Understanding
CO3	Exhibit effective communication, collaboration, and leadership skills while working in teams and as individuals in sports settings.	K3 – Application
CO4	Analyze situations, identify problems, and develop strategies to address them using critical thinking and problem-solving techniques.	K4 – Analyzing
CO5	Promote physical fitness and well-being by understanding	K5 – Evaluating

	the importance of physical activity, training, and wellness in sports.	
CO6	Uphold ethical standards, sportsmanship, and professional conduct in sports and fitness-related activities.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	1	1
CO2	3	3	1	3	1	1
CO3	1	3	9	9	3	3
CO4	0	1	3	9	3	1
CO5	1	3	1	3	9	3
CO6	0	1	0	1	3	9
Weightage	14.74%	12.63%	29.47%	17.89%	21.05%	14.74%

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	-	PO1,PO2,PO3,PO4	PO5,PO6	-
CO2/K2/K3	-	PO1,PO2,PO4	PO3,PO5,PO6	-
CO3/K3/K4	PO3,PO4	PO2,PO5,PO6	PO1	-
CO4/K4/K5	PO4	PO3,PO5	PO2,PO6	PO1
CO5/K5/K6	PO5	PO2,PO4,PO6	PO1,PO3	-
CO6/K6	PO6	PO5	PO2,PO4	PO1,PO3

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – IV

For who joined from 2025 onwards

Prog Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25PE6	Core	Methods in Physical Education	Theory	3	**3**

COURSE DESCRIPTION:

This course is designed to provide students with an understanding of the principles, methods, and techniques in physical education teaching. It covers various instructional strategies and teaching methodologies used to effectively impart physical education to diverse student populations. The course includes practical aspects of organizing and conducting physical education classes, understanding the role of physical education in overall development, and enhancing the skills of future educators.

COURSE OBJECTIVES:

- To understand the different methods of teaching physical education.
- To explore the various techniques for developing physical fitness.
- To learn how to structure and organize physical education lessons.
- To provide students with practical skills for teaching physical education effectively.
- To enhance the ability to evaluate the performance and progress of students in physical education activities.

UNIT - I: STRUCTURE OF ORGANIZATION AND ADMINISTRATION (9hrs)

Meaning and importance:Understand the significance of organization and administration in physical education-Qualification & Responsibilities:Explore the qualifications and roles of Physical Education teachers and pupil leaders-Planning:Basics of planning and principles involved-Program Planning:Meaning, importance, and principles in physical education program planning.

UNIT – II – FUNCTIONS OF ORGANIZATION AND ADMINISTRATION (9hrs)

Functions:Explore the functions: Planning, organizing, staffing, directing, communicating, coordinating, controlling, evaluating, and innovating -Facilities & Equipment Management:

Types of facilities (indoor and outdoor), infrastructure management - Care and maintenance of facilities: school buildings, gymnasium, swimming pools, playgrounds - Equipment management: importance, care, and maintenance-Time Table Management-Understand the meaning, need, importance, and factors affecting time tables.

UNIT-III – COMPETITION ORGANIZATION (9hrs)

Importance of Tournaments: Understanding tournament organization and its role in physical education-Types of Tournaments-Knock-out, League (Round Robin), Combination, and Challenge Tournaments - Organization Structure:Structure of Athletic Meets and Sports Events.

Planning of Intramurals and Extramurals tournaments.

UNIT-IV – TEACHING TECHNIQUES & TEACHING AIDS (9hrs)

Teaching Techniques:Different teaching methods: Lecture, Command, Demonstration, Imitation, Project Method, etc. -Teaching Procedures: Whole method, Whole-Part-Whole method, Part-Whole method - Class Management: Presentation techniques and preparation.

Command: Meaning, types, and uses -Teaching Aids: Importance of teaching aids: Audio, Visual, Audio-Visual aids. Criteria for selecting aids: Chalkboard, Charts, Models, Slide projectors, etc - Team Teaching: Meaning, principles, and advantages of team teaching - Difference between teaching methods and teaching aids.

UNIT-V – CURRENT TRENDS AND TECHNOLOGY IN PHYSICAL EDUCATION (9hrs)

Modern Teaching Tools and Techniques in Physical Education - Role of Technology in Physical Education (Fitness apps, wearable devices, etc.) - Trends in Sports and Physical Fitness -Inclusion in Physical Education: Adapting lessons for differently-abled students.

TEXT BOOKS:

1. Sahu, P. K. (2020). Teaching Methods in Physical Education: A Practical Guide (2nd ed.). Oxford University Press.
2. Buchanan, M. & Brown, D. (2021). Teaching Physical Education: Methods, Principles, and Strategies (3rd ed.). Human Kinetics.

Unit – I: Book 1: Introduction to Teaching Methods in Physical Education (Chap:1)
Book 2: The Role of Physical Education in Schools (Chap:1&2)

Unit – II: Book 1: Theories and Principles of Learning (Chap:2)
Book 2: Principles of Teaching Physical Education (Chap:3&4)

Unit – III: Book 1: Traditional Teaching Methods (Chap:3)
Book: 2 Methods of Instruction (Chap:5&6)

Unit – IV: Book: 1 Modern Teaching Approaches in Physical Education (Chap:4)
Book :2 Planning and Organizing Lessons (Chap:7&8)

Unit: V: Book: 1 Developing Effective Lesson Plans (Chap:5)
Book :2 Assessing Student Learning. (Chap:9)

REFERECE BOOK(S):

1. Kumar, S. & Sharma, R. (2021). Principles of Teaching in Physical Education (4th ed.). Sports Publications.
2. Singh, H. (2020). Modern Approaches in Physical Education and Sports (2nd ed.). Wiley-Blackwell.

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. National Institute of Physical Education (NIPER) – Online courses, teaching methods, and research articles.
2. PE Central – A great resource for physical education lesson plans, activities, and assessment tools.
3. SPARK PE – Online resources, videos, and professional development in physical education.

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Understand and apply different teaching methods in physical education..	K1 – Remembering
CO2	Design effective lesson plans and manage physical education classes.	K2 – Understanding
CO3	Evaluate and assess students' performance in physical education activities.	K3 – Application
CO4	Understand the role of modern technology and trends in physical education.	K4 – Analyzing
CO5	Develop the skills necessary to teach physical education to diverse student populations.	K5 – Evaluating
CO6	Uphold ethical standards, sportsmanship, and professional conduct in sports and fitness-related activities.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	0	3	1
CO2	3	9	3	1	9	0
CO3	1	3	9	3	3	0
CO4	3	1	3	9	3	1
CO5	3	3	1	3	9	3
CO6	0	1	0	1	0	1
Weightage	26.0%	18.3%	18.3%	16.4%	27.0%	5.8%

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2,PO5	PO3,PO6	PO4
CO2/K2/K3	PO2,PO5	PO1,PO3	PO4	PO6
CO3/K3/K4	PO3	PO2,PO4,PO5	PO1	PO6
CO4/K4/K5	PO4	PO1,PO3,PO5	PO2,PO6	-
CO5/K5/K6	PO5	PO1,PO2,PO4	PO3	-
CO6/K6	-	-	PO2,PO4,PO6	PO1,PO3,PO5

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – IV
For who joined from 2025 onwards

Prog Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25APE6TP	Allied	Rules, Officiating and Coaching - Basketball& Throwball	Theory Practical	5	**5**

COURSE DESCRIPTION:

This course provides practical training in the fundamental and advanced skills of Basketball and Throwball. It aims to develop students' technical expertise, tactical knowledge, and officiating skills through structured practical sessions. Emphasis is given to game rules, strategies, and performance evaluation.

COURSE OBJECTIVES:

- Demonstrate fundamental skills and techniques in Basketball and Throwball.
- Understand and apply game rules and regulations.
- Develop coordination, teamwork, and tactical awareness in both sports.
- Officiate matches with an understanding of scoring systems and rule enforcement.
- Evaluate performance and suggest areas for improvement.

UNIT - I: INTRODUCTION TO BASKETBALL & THROWBALL (12 hrs)

History, origin, and development of Basketball & Throwball - Basic rules, regulations, and court dimensions - Equipment specifications and their importance

UNIT – II – FUNDAMENTAL SKILLS IN BASKETBALL (12 hrs)

Passing (Chest pass, Bounce pass, Overhead pass) - Dribbling (Low, high, crossover, spin move) Shooting (Layup, Jump shot, Free throw, Three-pointer) - Defensive techniques (Man-to-man, Zone defense) - Offensive strategies and formations.

UNIT-III – FUNDAMENTAL SKILLS IN THROWBALL (12 hrs)

Basic throwing techniques (Underhand, Overhead, Jump throw) - Passing and receiving techniques - Defensive and offensive formations - Blocking and court positioning - Coordination and teamwork drills.

UNIT-IV – ADVANCED TRAINING & MATCH PLAY (12 hrs)

Tactical drills and decision-making exercises - Strength and conditioning for Basketball & Throwball - Practice matches with real-time feedback - Analysis of common mistakes and rectification techniques.

UNIT-V – OFFICIATING & PERFORMANCE EVALUATION (12 hrs)

Officiating rules and responsibilities - Hand signals and match regulations - Scoring system and table officiating - Performance evaluation techniques and feedback methods - Organizing intra-college and inter-college competitions.

TEXT BOOKS:

1. Ramesh, S. (2022). Basketball: Techniques, Drills, and Strategies (2nd ed.). Human Kinetics.
2. Sharma, P. (2021). Throwball: A Guide to Skills and Coaching (3rd ed.). Sports Publications.

Unit – I: Book 1: Chapter 1&2: History & Evolution of Basketball, Rules & Regulations

Book 2: Chapter 1: Basics of Volleyball

Unit – II: Book 1: Chapter 3&4: Fundamental Skills & Offensive & Defensive Strategies

Book 2: Chapter 2: Fundamental Skills – Covers serving, passing, setting, attacking, blocking, and digging.

Unit – III: Book 1: Chapter 5 & 6 Coaching Techniques, Strength

Book: 2 Chapter 3: Advanced Techniques – Focuses on jump serves, quick attacks, and defensive formations.

Unit – IV: Book: 1 Chapter 7: Psychology & Motivation in Basketball

Book :2 Chapter 4: Training Drills & Practice Plans

Unit: V: Book: 1 Conditioning for Basketball

Book :2 Assessing Chapter 5: Coaching Strategies

REFERECE BOOK(S):

1. Singh, H. (2023). Advanced Basketball Coaching & Performance. Routledge.
2. Thomas, L. (2022). Throwball: A Comprehensive Approach to Training and Tactics. Oxford University Press.

DIGITAL OPEN EDUCATIONAL RESOURCES:

- FIBA Official Basketball Rules: www.fiba.basketball
- International Throwball Federation: www.throwball.org
- YouTube Coaching Videos: NBA Skills Development, Throwball Training Drills

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Demonstrate fundamental skills in Basketball and Throwball, including dribbling, passing, shooting, and serving techniques.	K1 – Remembering
CO2	Explain the rules, regulations, and officiating procedures for Basketball and Throwball.	K2 – Understanding
CO3	Apply offensive and defensive strategies effectively during gameplay.	K3 – Application
CO4	Analyze team coordination, game tactics, and opponent strategies.	K4 – Analyzing
CO5	Evaluate individual and team performance through self-assessment and peer feedback.	K5 – Evaluating
CO6	Develop leadership, teamwork, and sportsmanship skills through practical sessions and competitions.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6

CO1	9	3	1	0	3	1
CO2	3	9	3	3	9	0
CO3	1	3	9	3	3	0
CO4	3	1	3	9	3	1
CO5	3	3	1	3	9	3
CO6	1	3	0	1	0	1
Weightage	27.0%	21.3%	20.3%	16.4%	27.0%	5.8%

CO/K - Level	**Level of Correlation**			
	HIGH	**MEDIUM**	**LOW**	**ZERO**
CO1/K1/K2/K3	**PO1**	**PO2,PO5**	**PO3,PO6**	**PO4**
CO2/K2/K3/K1	**PO2,PO5**	**PO1,PO3,PO4**	**PO5**	**PO6**
CO3/K3/K4/K5	**PO3**	**PO2,PO4,PO5**	**PO1**	**PO6**
CO4/K4/K5/K6	**PO4**	**PO1,PO3,PO5**	**PO2,PO6**	**-**
CO5/K5/K6	**PO5**	**PO1,PO2,PO4**	**PO3**	**-**
CO6/K6,K3,K2	**-**	**-**	**PO2,PO4,PO6**	**PO1,PO3,PO5**

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	**C1**	**C2**	**C3**	**Total Scholastic Marks C4**	**Non Scholastic Marks C4**	**CIA**	**% of Assessment**
	T1 4 Marks	**T2 10 Marks**	**Assignment 6 Marks**	**20 Marks**	**Attendance 5 Marks**	**25 Marks**	
K1	**1**	**1**	**1**	**3**		**3**	**12**
K2	**1**	**1**	**1**	**3**		**3**	**12**
K3	**1**	**2**	**1**	**4**		**4**	**16**
K4	**1**	**2**	**1**	**4**		**4**	**16**
K5	**-**	**2**	**1**	**3**		**3**	**12**
K6	**-**	**2**	**1**	**3**		**3**	**12**
Non Scholastic	**-**	**-**	**-**	**-**		**5**	**20**
Total	**4**	**10**	**6**	**20**	**5**	**25**	**100%**

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – IV
For who joined from 2025 onwards

Prog Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25PENME1	NME	Fitness & Wellness	Theory	3	**2**

Course Description

The course Fitness and Wellness introduces students to the fundamental concepts of health, physical fitness, and overall well-being. It emphasizes the importance of adopting a healthy lifestyle through regular physical activity, balanced nutrition, stress management, and preventive health practices. Students will gain both theoretical knowledge and practical skills to assess their own fitness levels, design personalized wellness plans, and apply strategies for maintaining physical, mental, and social wellness throughout life. This course equips learners with lifelong skills that foster holistic development, productivity, and quality of life.

COURSE OBJECTIVES:

- Provide knowledge of the principles and importance of fitness and wellness.
- Develop awareness of healthy lifestyle practices and preventive health care.
- Enable students to assess their physical fitness and adopt appropriate exercise programs.
- Promote stress management techniques for mental and emotional well-being.
- Equip students with lifelong skills to maintain holistic health and wellness.

UNIT I: INTRODUCTION TO FITNESS AND WELLNESS

- Meaning, definition, and importance of fitness & wellness.
- Dimensions of wellness – physical, mental, social, emotional, spiritual.
- Relationship between lifestyle and wellness.
- Barriers to fitness and wellness.

UNIT II: COMPONENTS OF PHYSICAL FITNESS

- Health-related components: Strength, endurance, flexibility, body composition.
- Skill-related components: Agility, balance, coordination, speed, reaction time.
- Principles of exercise – overload, progression, specificity.
- Warm-up, cool-down, safety measures.

UNIT III: NUTRITION AND WELLNESS

- Basic concepts of nutrition: Macronutrients & micronutrients.
- Balanced diet and hydration.
- Nutrition for fitness and performance.
- Lifestyle diseases and dietary management (obesity, diabetes, hypertension).

UNIT IV: STRESS MANAGEMENT AND MENTAL WELLNESS

- Stress: Causes, symptoms, and impact on health.
- Stress management techniques: Yoga, meditation, relaxation, recreational activities
- Role of physical activity in mental health.
- Emotional well-being and resilience.

UNIT V: FITNESS ASSESSMENT AND PERSONAL WELLNESS PLAN

- Fitness testing protocols (cardio-respiratory endurance, flexibility, strength).
- Body composition analysis (BMI, WHR, skinfold).
- Designing a personal fitness and wellness program.
- Lifelong fitness: Strategies for sustaining health and wellness.

TEXT BOOKS:

1. Corbin, C. B., Welk, G. J., Corbin, W. R., & Welk, K. (2024). Concepts of Fitness and Wellness: A Comprehensive Lifestyle Approach (13th ed.). McGraw-Hill.
2. Fahey, T. D., Insel, P., & Roth, W. T. (2023). Fit & Well: Core Concepts and Labs in Physical Fitness and Wellness (15th ed.). McGraw-Hill.

Unit I: Introduction to Fitness and Wellness (Pages 1–35)
Unit II: Components of Physical Fitness (Pages 36–75)
Unit III: Nutrition and Wellness (Pages 76–115)
Unit IV: Stress Management and Mental Wellness (Pages 116–155)
Unit V: Fitness Assessment and Personal Wellness Plan (Pages 156–200)

Reference Books:

1. Hoeger, W. W. K., & Hoeger, S. A. (2022). Principles and Labs for Fitness and Wellness (17th ed.). Cengage Learning.
2. Sharkey, B. J., & Gaskill, S. E. (2019). Fitness and Health (7th ed.). Human Kinetics.

Digital Resources:
World Health Organization (WHO) – Health & Wellness: https://www.who.int/health-topics
American College of Sports Medicine (ACSM): https://www.acsm.org

Course Outcomes:
CO1: Define concepts and dimensions of physical fitness, health, and wellness. (K1)
CO2: Explain the principles of exercise, nutrition, and stress management. (K2)
CO3: Apply fitness assessment techniques in practical settings. (K3)
CO4: Analyze personal lifestyle habits and design a personalized wellness plan. (K4)
CO5: Evaluate and integrate lifelong strategies for physical, mental, and social well-being. (K5)

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	0	0	0
CO2	3	9	9	1	9	0
CO3	1	3	9	3	1	0
CO4	3	1	3	9	3	1
CO5	1	1	1	3	9	3
CO6	1	1	0	1	3	9
Weightage	15.79%	15.79%	20.18%	14.91%	21.93%	11.40%

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2,PO5	PO3,PO6	PO4
CO2/K2/K3	PO2,PO5	PO1,PO3,PO4	PO5	PO6
CO3/K3/K4/K5	PO3	PO2,PO4,PO5	PO1	PO6
CO4/K4/K5	PO4	PO1,PO3,PO5	PO2,PO6	-
CO5/K5/K6	PO5	PO1,PO2,PO4	PO3	-
CO6/K6,K3,K2	-	-	PO2,PO4,PO6	PO1,PO3,PO5

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – V

For who joined from 2025 onwards

Prog Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25PE7TP	Core	Indigenous Games - Kabaddi, Kho-Kho & Silambam,	Theory Practical	6	**5**

COURSE DESCRIPTION:

This course focuses on the theoretical and practical aspects of indigenous sports, including Kabaddi, Silambam, and Kho-Kho. Students will learn fundamental skills, game rules, and strategies for effective gameplay. The course emphasizes the historical, cultural, and physical benefits of these traditional sports and provides hands-on experience in coaching, officiating, and performance evaluation.

COURSE OBJECTIVES:

- Understand the history, origin, and significance of indigenous games.
- Develop proficiency in the fundamental skills, techniques, and rules of Kabaddi, Silambam, and Kho-Kho.
- Apply appropriate strategies for offense and defense in game situations.
- Demonstrate leadership, teamwork, and sportsmanship in competitive play.
- Assess performance and implement training plans for skill improvement.

UNIT - I: INTRODUCTION TO INDIGENOUS SPORTS (12hrs)

History and cultural significance of Kabaddi, Silambam, and Kho-Kho-Evolution and development of the games in India and worldwide-Basic rules, equipment, and court layout.

UNIT – II – KABADDI TECHNIQUES AND STRATEGIES (12hrs)

Fundamental skills: Raiding, defending, and dodging techniques-Game strategies: Chain system, block techniques, and counterattacks-Officiating and rule interpretations.

UNIT-III – SILAMBAM FUNDAMENTALS (12hrs)

Basics of Silambam: Hand positions, footwork, and weapon handling-Advanced techniques: Offensive and defensive strikes-Traditional training methods and competitive applications.

UNIT-IV – KHO-KHO SKILLS AND GAME TACTICS (12hrs)

Fundamental techniques: Chasing, dodging, and pole dives-Offensive and defensive strategies in team formations-Officiating procedures and rule applications.

UNIT-V – COACHING, FITNESS, AND PERFORMANCE EVALUATION (12hrs)

Training methodologies and conditioning drills for indigenous sports - Game-specific endurance, agility, and strength training - Self-assessment, peer evaluation, and coaching principles.

TEXT BOOKS:

1. Ghosh, S. (2022). Traditional Indian Games: Theory and Practice. Sports Publications.
2. Kumar, R. (2021). Coaching Indigenous Sports: Techniques & Training Methods. Human Kinetics.

Unit – I: Book 1: Chapter 1&2: History & Evolution of Basketball, Rules & Regulations
Book 2: Chapter 1: Basics of Volleyball
Unit – II: Book 1: Chapter 3&4: Fundamental Skills & Offensive & Defensive Strategies
Book 2: Chapter 2: Fundamental Skills – Covers serving, passing, setting, attacking, blocking, and digging.
Unit – III: Book 1: Chapter 5 & 6 Coaching Techniques, Strength
Book: 2 Chapter 3: Advanced Techniques – Focuses on jump serves, quick attacks, and defensive formations.
Unit – IV: Book: 1 Chapter 7: Psychology & Motivation in Basketball
Book :2 Chapter 4: Training Drills & Practice Plans
Unit: V: Book: 1 Conditioning for Basketball
Book :2 Assessing Chapter 5: Coaching Strategies

REFERECE BOOK(S):

1. Sharma, P. (2023). Kabaddi: Rules, Techniques, and Strategies. Oxford University Press.
2. Nair, V. (2020). Silambam: An Ancient Martial Art of India. Routledge.

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. International Kabaddi Federation (IKF): www.kabaddiikf.com
2. Kho-Kho Federation of India: www.khokhofederation.in
3. YouTube Coaching Tutorials: Various channels providing training drills and coaching insights.
4. Silambam Training Online: www.silambamtraining.com

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Explain the history and significance of indigenous sports.	K1 – Remembering
CO2	Demonstrate fundamental techniques of Kabaddi, Silambam, and Kho-Kho.	K2 – Understanding
CO3	Analyze and apply offensive and defensive game strategies.	K3 – Application
CO4	Officiate and enforce the rules of Kabaddi, Silambam, and Kho-Kho.	K4 – Analyzing
CO5	Design training and conditioning programs for players.	K5 – Evaluating
CO6	Develop teamwork, leadership, and sportsmanship skills.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	0	0	0
CO2	3	9	9	1	9	0
CO3	1	3	9	3	1	0
CO4	3	1	3	9	3	1
CO5	1	1	1	3	9	3
CO6	1	1	0	1	3	9
Weightage	15.79%	15.79%	20.18%	14.91%	21.93%	11.40%

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2,PO5	PO3,PO6	PO4
CO2/K2/K3	PO2,PO5	PO1,PO3,PO4	PO5	PO6
CO3/K3/K4/K5	PO3	PO2,PO4,PO5	PO1	PO6
CO4/K4/K5	PO4	PO1,PO3,PO5	PO2,PO6	-
CO5/K5/K6	PO5	PO1,PO2,PO4	PO3	-
CO6/K6,K3,K2	-	-	PO2,PO4,PO6	PO1,PO3,PO5

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – V

For who joined from 2025 onwards

Prog Code	Course Code	Course Type	Course Title	Category	Hrs/ Week	Credits
PEUS	U25PE8E	ELECTIVE	Guidance for Uniformed Services	Theory	3	**4**

COURSE DESCRIPTION:

This course is designed to equip students with essential knowledge, skills, and strategies to prepare for careers in uniformed services such as the Army, Navy, Air Force, Police, Fire Services, and Paramilitary Forces. The course focuses on physical, mental, and intellectual preparedness while also fostering leadership qualities, discipline, and patriotism. Special emphasis is placed on fitness training, communication skills, aptitude development, and understanding the structure and roles of various uniformed services in India.

COURSE OBJECTIVES:

- To introduce students to the structure and functioning of Indian uniformed services.
- To develop physical fitness and endurance suitable for service entry standards.
- To enhance cognitive and leadership skills through training and practice.
- To foster discipline, responsibility, and national pride.
- To provide guidance on recruitment procedures and examination strategies.

UNIT - I: INTRODUCTION TO UNIFORMED SERVICES (12hrs)

Importance of uniformed services in national development- Overview of Indian Army, Navy, Air Force, Police, Fire Services, and Paramilitary Forces - Roles and responsibilities of personnel.

UNIT – II – PHYSICAL FITNESS AND TRAINING (12hrs)

Endurance, strength, agility, flexibility, and balance - Practice of drills, obstacle courses, route marches - Fitness parameters for various services.

UNIT-III – LEADERSHIP AND DISCIPLINE (12hrs)

Leadership qualities and training methods - Code of conduct, discipline, and ethical responsibilities - Time management and team-building exercises.

UNIT-IV – MENTAL APTITUDE AND COMMUNICATION (12hrs))

Verbal and non-verbal reasoning - Effective communication, group discussions, and public speaking - Personality development and interview techniques.

UNIT-V RECRUITMENT GUIDANCE (12hrs)

Eligibility, examination patterns, physical and medical standards - Guidance for SSB, UPSC, SSC, TNUSRB, and other exams - Mock tests and interview simulation.

TEXT BOOKS:

1. Handbook on Career in Uniformed Services – Ministry of Defence Publications
2. Physical Education and Sports Training Manual – Dr. K. Ramesh

Unit – I: Book 1: Chapter 1: Introduction to Uniform Services
Book 2: Chapter 1: Introduction to overview of different services
Unit – II: Book 1: Importance of Fitness
Book 2: Chapter 2: Fitness Parameters
Unit – III: Book 1: Chapter 3: Leadership
Book: 2 Chapter 3: Ethical Responsibilities
Unit – IV: Book: 1 Chapter 4: Verbal and non verbal Reasoning
Book :2 Chapter 4: Personality development
Unit: V: Book: 1 Chapter 5: • Guidance for SSB, UPSC, SSC, TNUSRB, and other exams.
Book :2 Chapter 5: • Mock tests and interview simulation.

REFERECE BOOK(S):

1. Indian Armed Forces: Structure and Functions – C. Rajagopalan
2. NCC Training Manual – Directorate General, NCC
3. Crack the SSB Interview – Arihant Experts
4. Reasoning & Aptitude for Competitive Exams – R.S. Aggarwal

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. Join Indian Army / Navy / Air Force Official Websites
2. YouTube Channels – SSB Crack, Defence Direct Education, Officers' Academy
3. Apps – "SSB Interview Preparation," "Defence Exams," "Daily Physical Training"
4. Online Portals – UPSC, TNUSRB, CAPF official notifications and mock exams

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Understand the roles, responsibilities, and structure of various uniformed services in India	K1, K2 – Remembering
CO2	Demonstrate improved physical fitness aligned with service requirements	K3 – Understanding
CO3	Apply mental aptitude and communication skills relevant to competitive selection processes	K3, K4 – Application
CO4	Exhibit leadership qualities and disciplined behavior essential for uniformed services	K4, K5 – Analyzing
CO5	Analyze and prepare strategies for recruitment exams and selection interviews	K5, K6 – Evaluating
CO6	Develop physical and mental endurance along with ethical responsibility, fostering a disciplined lifestyle	K6 - Creating

	aligned with the core values of national service.	

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	9	1	1	1	1
CO2	1	9	9	1	1	3
CO3	9	1	9	9	3	1
CO4	1	1	9	9	9	1
CO5	9	9	1	9	9	9
CO6	1	9	9	9	3	1
Weightage	15%	15%	20%	20%	15%	15%

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1,PO2	-	PO3,PO4,PO5,PO6	-
CO2/K2/K3	PO2,PO3	PO6	PO1,PO4,PO5	-
CO3/K3/K4/K5	PO1,PO3,PO4	PO5	PO2,PO6	-
CO4/K4/K5	PO3,PO4,PO5	-	PO1,PO2,PO6	-
CO5/K6	PO1,PO2,PO4, PO5,PO6	-	PO3	-
CO6/K5/K6	PO2,PO3,PO4	-	PO5	PO1,PO6

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – V

For who joined from 2025 onwards

Programe Code	Course Code	Corse Type	Course Title	Category	Hrs/Week	Credits
PEUS	U25PE9E	ELECTIVE	Adapted Physical Education	Theory	3	4

COURSE DESCRIPTION:

This course focuses on adapted physical education (APE) principles, emphasizing inclusion, modifications, and accommodations for individuals with disabilities. It covers assessment methods, instructional strategies, program development, and the role of physical educators in creating an inclusive learning environment.

COURSE OBJECTIVES:

- Understand the fundamental concepts of adapted physical education and its significance.
- Learn various assessment techniques for individuals with disabilities.
- Design and implement adapted physical activity programs.
- Explore inclusive teaching strategies and legal considerations.
- Analyze case studies and develop interventions for individuals with disabilities.

UNIT - I: INTRODUCTION TO ADAPTED PHYSICAL EDUCATION (12hrs)

Definition, scope, and importance of adapted physical education - Historical perspectives and legal frameworks (IDEA, ADA, Section 504) - Principles of adaptation and inclusion.

UNIT – II – DISABILITIES AND ASSESSMENT IN PHYSICAL EDUCATION (12hrs)

Types of disabilities: Physical, cognitive, sensory, and emotional - Assessment tools and methods for adapted physical education - Individualized Education Program (IEP) and goal-setting.

UNIT-III – ADAPTED SPORTS AND ACTIVITIES (12hrs)

Modified games and sports for individuals with disabilities - Wheelchair sports, Special Olympics, and Paralympics - Aquatic therapy and recreational activities.

UNIT-IV – TEACHING STRATEGIES AND INCLUSION TECHNIQUES (12hrs)

Instructional methods and differentiated teaching strategies - Equipment modification and environmental adaptation - Role of technology in adapted physical education.

UNIT-V – PROGRAM IMPLEMENTATION AND FUTURE TRENDS (12hrs))

Designing inclusive PE programs for schools and communities - Monitoring progress and evaluating effectiveness - Future trends in adapted physical education and rehabilitation.

TEXT BOOKS:

1. Winnick, J. P., & Porretta, D. L. (2019). Adapted Physical Education and Sport (6th ed.). Human Kinetics.
2. Sherrill, C. (2021). Adapted Physical Activity, Recreation, and Sport: Crossdisciplinary and Lifespan (8th ed.). McGraw Hill.

Unit – I: Book 1: Chapter 1: Chapter 1: Introduction to Adapted Physical Education and Sport (pp. 3-18)

Book 2: Chapter 1: Foundations of Adapted Physical Activity (pp. 1-20)

Unit – II: Book 1: Chapter 2: Understanding Disabilities in Physical Education (pp. 19-45)

Book 2: Chapter 2: Inclusion Strategies for Physical Education (pp. 21-45)

Unit – III: Book 1: Chapter 3: Program Organization and Planning (pp. 46-72)

Book: 2 Chapter 3: Developmental and Learning Theories (pp. 46-75)

Unit – IV: Book: 1 Chapter 4: Motor Development and Learning (pp. 73-95)

Book :2 Chapter 4: Disability Classifications and Adaptations (pp. 76-105)

Unit: V: Book: 1 Chapter 5: Teaching Strategies and Behavior Management (pp. 96-123)

Book :2 Chapter 5: Assessment and Individualized Instruction (pp. 106-138)

REFERECE BOOK(S):

1. Lieberman, L. J., & Houston-Wilson, C. (2020). Strategies for Inclusion: A Handbook for Physical Educators (3rd ed.). Human Kinetics.
2. Hutzler, Y. (2022). Physical Education for Children with Moderate to Severe Disabilities (2nd ed.). Routledge.

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. UNESCO Guidelines on Inclusive Physical Education
2. Special Olympics Coaching Resources (https://resources.specialolympics.org/)
3. National Consortium for Physical Education for Individuals with Disabilities (NCPEID)
4. Online Adaptive PE Modules (Coursera, edX, etc.)

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Understand fundamental concepts of APE	K1 – Remembering
CO2	Analyze different types of disabilities and assessments	K2 – Understanding
CO3	: Apply knowledge to develop inclusive physical education programs	K3 – Application
CO4	Evaluate the effectiveness of adapted teaching strategies	K4 – Analyzing
CO5	Design interventions and future programs for inclusive physical education	K5 – Evaluating
CO6	Demonstrate an understanding of the latest advancements and future trends in adapted physical education, including the role of technology, inclusive innovations, and rehabilitation techniques for individuals with disabilities.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	3	1	0
CO2	3	9	3	9	0	0
CO3	1	3	9	3	1	0
CO4	3	1	3	3	1	1
CO5	3	3	1	9	3	3
CO6	0	1	0	0	1	9
Weightage	17.76%	18.69%	15.89%	15.89%	25.23%	6.54%

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2,PO4	PO3,PO5	PO6
CO2/K2/K3	PO2,PO4	PO1,PO3	-	PO5,PO6
CO3/K3/K4/K5	-	PO2,PO4,	PO1,PO5	PO6
CO4/K4/K5	PO4	PO1,PO3,PO4	PO2,PO5,PO6	-
CO5/K6	PO4	PO1,PO2,PO5,PO6	PO3	-
CO6/K5/K6	PO6	-	PO2,PO5	PO1,PO3,PO5

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – V

For who joined from 2025 onwards

Programe Code	Course Code	Course Type	Course Title	Category	Hrs/Week	Credits
PEUS	U25PE10	Core	Sports Management	Theory	3	4

COURSE DESCRIPTION:

This course aims to provide students with an in-depth understanding of the principles and practices of sports management. It covers topics such as planning, organizing, staffing, directing, controlling, budgeting, event management, and legal aspects related to sports. It prepares students to take on leadership roles in educational institutions, sports organizations, and event management companies.

COURSE OBJECTIVES:

- To understand the principles and functions of sports management.
- To develop skills in organizing and managing sports events and facilities
- To gain knowledge of budgeting, accounting, and resource management in sports.
- To explore the role of leadership and ethics in sports organizations.
- To become familiar with legal and administrative concerns in sports.

UNIT - I: INTRODUCTION TO SPORTS MANAGEMENT (12hrs)

Meaning, Definition, Nature, and Scope of Sports Management - Skills and Qualities of a Sports Manager - Functions of Management: Planning, Organizing, Staffing, Directing, Controlling

UNIT – II – ORGANIZATIONAL STRUCTURE AND COMMUNICATION (12hrs)

Types of Organizational Structures in Sports - Role of Leadership and Team Building - Communication in Sports Organizations - Conflict Management and Decision Making

UNIT-III – SPORTS EVENT AND FACILITY MANAGEMENT (12hrs)

Planning and Conducting Sports Events - Facility Planning and Layout - Equipment Management and Maintenance - Risk Management and Safety

UNIT-IV – BUDGETING AND RESOURCE MANAGEMENT (12hrs)

Financial Management in Sports - Budget Planning and Allocation - Fundraising and Sponsorship - Procurement and Utilization of Resources

UNIT-V – ETHICS AND LEGAL ASPECTS (12hrs)

Ethics in Sports - Doping and Fair Play - Legal Issues in Sports Management- Role of Governing Bodies (IOA, SAI, NADA, WADA)

TEXT BOOKS:

1. Kannan, P. – Sports Management (Friends Publications, New Delhi)
2. Chelladurai, P. – Managing Organizations for Sport and Physical Activity

Unit – I: Book 1: Chapter 1: Chapter 1: Introduction to Sports Management Book 2: Chapter 1: Organizational Structures in Sports:

Unit – II: Book 1: Chapter 2: Event Planning and Management:
Book 2: Chapter 2: Marketing and Sponsorship in Sports:

Unit – III: Book 1: Chapter 3: Program Organization and Planning
Book: 2 Chapter 3: Future Trends in Sports Management

Unit – IV: Book: 1 Chapter 4: Foundations of Sport Management
Book :2 Chapter 4: Organizational Behavior in Sport

Unit: V: Book: 1 Chapter 5: Human Resource Management:
Book :2 Chapter 5: Strategic Planning and Decision Making

REFERECE BOOK(S):

1. Parks, B. et al. – Contemporary Sport Management
2. Earle F. Zeigler – Management Competency Development in Sport and Physical Education
3. Mullin, Hardy & Sutton – Sport Marketing
4. Horine, Larry – Administration of Physical Education and Athletic Programs

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. https://nssports.org – Sports event planning and templates
2. https://olympics.com – Governance and ethics in global sports
3. YouTube: Sport Management Series – Tutorials and lectures
4. Apps: Sport Event Planner, TeamSnap, Eventbrite for hands-on experience

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Understand the fundamentals and functions of sports management	K1 – Remembering
CO2	Apply organizational and leadership skills in managing sports teams and structures	K2 – Understanding
CO3	Plan and manage sports events and facilities effectively	K3 – Application
CO4	Analyze and prepare budgets, sponsorships, and resources	K4 – Analyzing
CO5	Evaluate ethical issues and legal frameworks in sports management	K5 – Evaluating
CO6	Demonstrate leadership, ethical practices, and professional responsibility in managing sports organizations and events, aligning with national and global standards.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	3	1	1

CO2	3	9	9	9	9	3
CO3	3	3	9	3	9	3
CO4	1	3	3	3	9	3
CO5	1	1	1	9	3	9
CO6	1	1	9	0	9	9
Weightage	10%	15%	15%	20%	20%	20%

CO/K - Level	**Level of Correlation**			
	HIGH	**MEDIUM**	**LOW**	**ZERO**
CO1/K1/K2	**PO1**	**PO2,PO4**	**PO3,PO5,PO6**	**-**
CO2/K2/K3	**PO2,PO3,PO4,PO5**	**PO1,PO6**	**-**	**-**
CO3/K3/K4	**PO3,PO5**	**PO1,PO2,PO4,**	**PO1,PO2,PO4,PO**	**-**
CO4/K4/K5	**PO5**	**PO2,PO3,PO4,PO6**	**PO1**	**-**
CO5/K5/K6	**PO1,PO6**	**PO5**	**PO3**	**-**
CO6/K6	**PO3,PO5,PO6**	**PO1,PO2**	**-**	**PO4**

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	**C1**	**C2**	**C3**	**Total Scholastic Marks C4**	**Non Scholastic Marks C4**	**CIA**	**% of Assessment**
	T1 4 Marks	**T2 10 Marks**	**Assignment 6 Marks**	**20 Marks**	**Attendance 5 Marks**	**25 Marks**	
K1	**1**	**1**	**1**	**3**		**3**	**12**
K2	**1**	**1**	**1**	**3**		**3**	**12**
K3	**1**	**2**	**1**	**4**		**4**	**16**
K4	**1**	**2**	**1**	**4**		**4**	**16**
K5	**-**	**2**	**1**	**3**		**3**	**12**
K6	**-**	**2**	**1**	**3**		**3**	**12**
Non Scholastic	**-**	**-**	**-**	**-**		**5**	**20**
Total	**4**	**10**	**6**	**20**	**5**	**25**	**100%**

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – V

For who joined from 2025 onwards

Programe Code	Course Code	Course Type	Course Title	Category	Hrs/Week	Credits
PEUS	U25PE11P	Core	Teaching Practice	Practical	3	5

COURSE DESCRIPTION:

This course provides hands-on teaching experience for Physical Education students, enabling them to plan, organize, and execute practical and theory lessons. It fosters professional skills through peer teaching, micro-teaching, real-school teaching practice, and constructive feedback sessions.

COURSE OBJECTIVES:

- Develop lesson plans for physical education classes (theory & practical).
- Demonstrate micro-teaching skills.
- Practice teaching in real classroom and field settings.
- Use teaching aids and assessment tools effectively.
- Gain confidence in managing students, time, and class flow.

UNIT - I: LESSON PLANNING (15 HRS)

Components of lesson plans: Objectives, materials, methods, and evaluation -Planning warm-up, skill teaching, and cool-down phases - Preparing lesson plans for games, athletics, and fitness components.

UNIT – II – MICRO TEACHING (15 HRS)

Introduction to micro-teaching: concepts and benefits - Practicing core teaching skills (e.g., introduction, explanation, demonstration, questioning) - Peer teaching and feedback mechanism.

UNIT-III – PRACTICE TEACHING SESSIONS (15 HRS)

Simulated teaching of physical activities - Real-school teaching observation and execution - Class management and safety protocols - Record maintenance and reporting.

UNIT-IV – TEACHING AIDS AND EVALUATION (15 HRS)

Charts, flashcards, ICT tools, models, sports equipment - Evaluation strategies: checklists, rubrics, feedback forms.

TEXT BOOKS:

1. Singh, A. – Teaching Methodology in Physical Education
2. Kamlesh, M. L. – Physical Education: Facts and Foundations

REFERECE BOOK(S):

1. Wuest & Bucher – Foundations of Physical Education and Sport
2. Bhatia & Bhatia – The Principles and Methods of Teaching

3. Dr. K. S. Reddy – Pedagogical Approaches in Physical Education

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. SWAYAM Online Courses – Teaching Strategies in Physical Education
2. YouTube: EdTech PE Training, Physical Education Teaching Demos
3. Open Educational Resources (OER Commons) – Lesson Planning Templates
4. Microsoft Teams/Google Classroom for simulated virtual teaching practice

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Prepare structured lesson plans for physical education classes	K3, K5 – Remembering
CO2	Demonstrate teaching skills through micro-teaching	K2, K3 – Understanding
CO3	Conduct full-length practice teaching sessions in real or simulated environments	K3, K4 – Application
CO4	Effectively utilize teaching aids and tools during instruction	K2, K5 – Analyzing
CO5	Assess students' participation and performance using appropriate tools	K4, K5 – Evaluating
CO6	Reflect on personal teaching performance and identify areas for improvement	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	3	1	3	3
CO2	9	3	3	3	3	3
CO3	9	3	9	3	3	3
CO4	3	3	3	9	3	3
CO5	3	3	3	3	9	3
CO6	3	3	3	3	3	9
Weightage	15%	15%	20%	15%	25%	20%

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2,PO3,PO5,PO6	PO4	-
CO2/K2/K3	PO1	PO2,PO3,PO5,PO6, PO4		
CO3/K3/K4/K5	PO4	PO2,PO4,PO5,PO6,PO3		
CO4/K4/K5	PO4	PO1,PO2,PO3,PO5,PO6	-	-
CO5/K6	PO4	PO1,PO2,PO5,PO6,PO3	PO3	-
CO6/K5/K6	PO6	PO1,PO2,PO4,PO5,PO6,PO3	-	-

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – VI

For who joined from 2025 onwards

Programe Code	Course Code	Course Title	Course Type	Category	Hrs/Week	Credits
PEUS	U25PENME2	Health and Nutrition	NME	Theory	3	2

COURSE DESCRIPTION:

This course is designed to provide foundational knowledge in health education and essential first aid skills. It helps students understand the principles of health, hygiene, disease prevention, and emergency care, enabling them to act responsibly in promoting personal and community health.

COURSE OBJECTIVES:

- To understand the importance of health and nutrition in daily life.
- To know about different types of food and their role in growth and energy.
- To promote healthy eating habits among students.
- To create awareness about lifestyle diseases and prevention.

UNIT - I: INTRODUCTION TO HEALTH AND NUTRITION (12 hrs)

- Meaning of health, nutrition, and wellness
- Importance of good food habits
- Relation between food, fitness, and growth

UNIT – II – NUTRIENTS AND THEIR FUNCTIONS (12 hrs)

- Carbohydrates – energy-giving foods
- Proteins – body-building foods
- Fats – energy storage
- Vitamins and minerals – protective foods
- Water – the most essential nutrient

UNIT-III – BALANCED DIET (12hrs)

- Concept of a balanced diet
- Food pyramid and daily dietary requirements
- Examples of balanced meals for school children
- Importance of breakfast

UNIT-IV – NUTRITION AND COMMON PROBLEMS (12 hrs)

- Malnutrition: under-nutrition and obesity
- Deficiency diseases (anemia, goiter, rickets, night blindness)
- Effects of junk food and soft drinks
- Importance of hygiene in food

UNIT-V -HEALTHY LIFESTYLE AND WELLNESS (12 hrs)

- Good eating habits and food safety
- Exercise and outdoor activities for fitness
- Managing stress and mental health through proper diet
- Preventing lifestyle diseases (diabetes, hypertension, obesity)

TEXT BOOKS:

1. Kannan, P. (2023)– Nutrition, Friends Publications.
2. Bucher, C.A. (2022)– Sports Health, Prentice Hall.

Unit – I: Book 1: Chapter 1: Concept of Health & Wellness (Pg No 1–12)
Book 2: Chapter 2: Hygiene and Nutrition(Pg No 13–25)
Unit – II: Book 1: Chapter 3: Communicable Diseases (Pg No 26–40)
Book 2: Chapter 5: Lifestyle Diseases (Pg No 41–52)
Unit – III: Book 1: Chapter 3: Chapter 4: Health Education (Pg No 53–65)
Chapter 5: Community Health (Pg no 66-80)
Book: 2 Chapter 7: Nutrition Essentials (pg no 81–96)
Unit – IV: Book: 1 Chapter 6: Principles & Methods of Teaching Health
(pg no19-35)
Book :2 Chapter 9: Role of Government and NGOs (96–108)
Unit: V: Book: 1 Chapter 9: Food pyramid (pg no79–95)

REFERECE BOOK(S):

1. Yadav, P. – Health Education and Nutrition, Sports Publication
2. David A. Ross – Nutition Manual, Dorling Kindersley
3. Park, K. – Preventive and Social Medicine, Banarsidas Bhanot

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. www.who.int – World Health Organization
2. www.nhp.gov.in – National Health Portal
3. Mobile apps: Red Cross First Aid, Medscape, 104 Helpline

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Understand the fundamentals of health and hygiene.	K1 – Remembering
CO2	Macro and micro nutrition and their daily intake	K2 – Understanding
CO3	Apply personal and environmental hygiene practices in daily life.	K3 – Application
CO4	Nutrition and its benefits .	K4 – Analyzing
CO5	Explain the role of health agencies in national health improvement.	K5 – Evaluating
CO6	Promote health and fitness through physical education programs.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	3	0	0	0
CO2	9	3	3	3	0	0
CO3	3	3	9	3	3	0
CO4	3	3	9	3	3	0
CO5	3	3	3	9	3	3
CO6	3	3	3	3	3	3
Weightage	5%	10%	25%	20%	20%	20%

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/ K2, K3	PO1	PO2,PO3	-	PO4,PO5,PO6
CO2/ K3, K4	PO1,PO2	PO3,PO4	-	PO5,PO6
CO3/ K4, K5	PO2,PO3	PO1,PO4,PO5	-	PO6
CO4/ K3, K5	PO3	PO1,PO2,PO3,PO4,PO5,PO6	-	-
CO5/ K2, K3	PO4	PO2,PO3,PO5,PO6	PO1	-
CO6/ K5, K6	PO6	PO2,PO3,PO4,PO5,PO6	-	-

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – VI
For who joined from 2025 onwards

Programe Code	Course Code	Course Type	Course Title	Category	Hrs/Week	Credits
PEUS	U25PE12TP	Core	Rules, Officiating and Coaching- Badminton, Swimming, Hockey & Tennis	Theory Practical	5	4

COURSE DESCRIPTION:

This course is designed to develop practical proficiency and theoretical understanding in four major games/sports – Badminton, Swimming, Hockey and Tennis. Students will learn fundamental techniques, rules, tactics, and officiating, enabling them to perform and instruct these sports effectively.

COURSE OBJECTIVES:

- To learn the fundamental techniques and skills of Badminton, Swimming, Hockey, and Tennis.
- To understand the rules, scoring systems, and officiating procedures.
- To develop strategic and tactical awareness in gameplay.
- To improve physical fitness components related to each sport.
- To enhance leadership and teamwork through sport-specific activities.
- To prepare students for competitive participation and coaching roles.

UNIT - I: BADMINTON (15 hrs)

Grip, stance, footwork - Strokes: forehand, backhand, smash, drop, serve - Singles and doubles rules - Basic game tactics and match practice

UNIT – II – SWIMMING (15 hrs)

Strokes: Freestyle, Backstroke, Breaststroke, Butterfly - Starts and turns - Water safety and rescue techniques - Time trials and endurance sessions.

UNIT-III – HOCKEY (15 hrs)

Grip, dribbling, push pass, hit, flick, scooping - Rules of the game and positions - Offensive and defensive formations - Mini-matches and drills.

UNIT-IV – TENNIS (15 hrs)

Grips: Continental, Eastern, Western - Shots: Serve, Forehand, Backhand, Volley, Lob - Court dimensions, scoring, rules - Singles and doubles match drills.

TEXT BOOKS:

1. B. Shyamal – Fundamentals of Sports and Games

2. Tiwari, R.K. – Techniques of Sports and Games

REFERECE BOOK(S):

1. John Littleford – Badminton: Steps to Success
2. Nancy Hall – Swimming Drill Book
3. M.P. Singh – Hockey: Skills & Strategies
4. Brown, Jim – Tennis Fundamentals

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. YouTube Channels: CoachTube, Badminton Insight, SwimUp, Hockey Training, Essential Tennis
2. Apps: Hudl Technique, Swim Coach, Tennis Tracker
3. Websites: www.ittf.com, www.fina.org, www.bwfbadminton.com

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Demonstrate fundamental techniques of all four sports	K1 – Remembering
CO2	Apply appropriate game rules and scoring systems	K2 – Understanding
CO3	Execute offensive and defensive strategies effectively	K3 – Application
CO4	Officiate matches and maintain discipline in sport environments	K4 – Analyzing
CO5	Enhance physical fitness and conditioning through sport-specific training	K5 – Evaluating
CO6	Evaluate personal and peer performance in practice and competition	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	3	1	3	1
CO2	9	3	3	3	3	1
CO3	3	3	9	3	3	3
CO4	3	3	3	9	3	3
CO5	3	3	3	3	9	3
CO6	1	3	3	3	3	9
Weightage	15%	15%	20%	15%	15%	20%

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/ K2,	PO1	PO2,PO3,PO5	PO4,PO6	-

K3				
CO2/ K3, K4	**PO1**	**PO2,PO3,PO4,PO5**	**-**	**-**
CO3/ K4, K5	**PO3,PO5**	**PO1,PO2,PO4,**	**PO1,PO2,PO4,PO**	**-**
CO4/ K3, K5	**PO5**	**PO2,PO3,PO4,PO6**	**PO1**	**-**
CO5/ K2, K3	**PO1,PO6**	**PO5**	**PO3**	**-**
CO6/ K5, K6	**PO3,PO5,PO6**	**PO1,PO2**	**-**	**PO4**

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	**C1**	**C2**	**C3**	**Total Scholastic Marks C4**	**Non Scholastic Marks C4**	**CIA**	**% of Assessment**
	T1 4 Marks	**T2 10 Marks**	**Assignment 6 Marks**	**20 Marks**	**Attendance 5 Marks**	**25 Marks**	
K1	**1**	**1**	**1**	**3**		**3**	**12**
K2	**1**	**1**	**1**	**3**		**3**	**12**
K3	**1**	**2**	**1**	**4**		**4**	**16**
K4	**1**	**2**	**1**	**4**		**4**	**16**
K5	**-**	**2**	**1**	**3**		**3**	**12**
K6	**-**	**2**	**1**	**3**		**3**	**12**
Non Scholastic	**-**	**-**	**-**	**-**		**5**	**20**
Total	**4**	**10**	**6**	**20**	**5**	**25**	**100%**

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – VI
For who joined from 2025 onwards

Programe Code	Course Code	Course Type	Course Title	Category	Hrs/Week	Credits
PEUS	U25PE13	Core	Exercise Physiology & Sports Injuries	Theory	3	4

COURSE DESCRIPTION:

This course explores the physiological responses and adaptations of the human body to physical activity and exercise. It equips students with knowledge of muscular, cardiovascular, respiratory, and energy systems, emphasizing their role in physical training, sports performance, and fitness enhancement.

COURSE OBJECTIVES:

- To understand the basic concepts of human physiology related to exercise.
- To examine the function and structure of muscular, cardiovascular, and respiratory systems.
- To explore energy metabolism during rest and exercise.
- To understand physiological responses to acute and chronic exercise.
- To assess the effect of training on various body systems.

UNIT - I: INTRODUCTION TO EXERCISE PHYSIOLOGY (15 hrs)

Definition, importance, scope - Structure and function of skeletal muscles - Types of muscle fibers, muscle contraction (sliding filament theory).

UNIT – II – ENERGY SYSTEMS (15 hrs)

ATP, ADP, CP system - Anaerobic glycolysis - Aerobic system - Oxygen debt and EPOC- Effects of long-term training on muscle, heart, and lungs - Ergogenic aids and their impact on performance

UNIT-III – PHYSIOLOGICAL RESPONSES TO EXERCISE (15 hrs)

Structure and function of the heart - Blood circulation, blood pressure - Mechanics of breathing - VO_2 max, lung volumes and capacities- Heart rate, stroke volume, cardiac output during exercise - Respiratory changes with exercise -Thermoregulation and fatigue.

UNIT-IV – INTRODUCTION TO SPORTS INJURIES (15 hrs)

Definition & Importance- **Classification of Injuries**- **Causes of Injuries**- Common Sports Injuries- Prevention of Injuries

UNIT-V - MANAGEMENT & REHABILITATION OF SPORTS INJURIES (15 hrs)

Immediate Care (First Aid) - PRICE principles (Protect, Rest, Ice, Compression, Elevation)- Sports Taping & Bandaging- Rehabilitation Principles- Psychological Aspects.

TEXT BOOKS:

1. Scott K. Powers & Edward T. Howley – Exercise Physiology: Theory and Application to Fitness and Performance
2. William D. McArdle, Frank I. Katch – Exercise Physiology: Nutrition, Energy, and Human Performance

Unit – I: Book 1: Chapter 0: Introduction to Exercise Physiology
Chapter 1Common Measurements in Exercise Physiology
Book 2: Chapter 2: Macronutrients and Energy Transfer

Unit – II: Book 1: Chapter 2: Control of the Internal Environment
Chapter 3: Bioenergetics
Book 2: Chapter 5: Human Energy Transfer During Exercise

Unit – III: Book 1: Chapter 3: Chapter 4: Exercise Metabolism
Chapter 5: Cell Signaling and the Hormonal Responses to Exercise
Book: 2 Chapter 7: The Pulmonary System and Exercise

Unit – IV: Book: 1 Chapter 6: Exercise and the Immune System
Chapter 8: Skeletal Muscle: Structure and Function
Book :2 Chapter 9: Skeletal Muscle: Structure and Function

Unit: V: Book: 1 Chapter 9: Circulatory Responses to Exercise
Chapter 10: Respiration during Exercise
Book :2 Chapter 12: Training for Anaerobic and Aerobic Power

REFERECE BOOK(S):

1. Fox, Bowers & Foss – The Physiological Basis of Physical Education and Athletics
2. Evelyn B. Man – The Physiology of Exercise
3. Wilmore & Costill – Physiology of Sport and Exercise

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. NPTEL Lectures on Exercise Physiology
2. SWAYAM – "Physiology of Exercise and Sports" course
3. Khan Academy: Human Physiology modules
4. YouTube: PhysioTutor, Science for Sport, EliteFTS Education

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Explain the fundamental principles of exercise physiology	K1 – Remembering
CO2	Describe the structure and function of major body systems during exercise	K2 – Understanding
CO3	Apply knowledge of energy systems to training and performance	K3 – Application

CO4	Analyze acute and chronic physiological responses to exercise	K4 – Analyzing
CO5	Evaluate the effects of physical training on performance parameters	K5 – Evaluating
CO6	Use basic physiological tests to assess fitness and performance	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	0	0	0
CO2	3	3	3	3	3	0
CO3	3	3	9	3	3	0
CO4	1	3	3	9	3	3
CO5	0	3	3	3	9	3
CO6	0	3	3	3	3	9
Weightage	5%	15%	25%	20%	20%	15%

CO/K - Level	**Level of Correlation**			
	HIGH	**MEDIUM**	**LOW**	**ZERO**
CO1/ K 2, K3	**PO1**	**PO2**	**PO3**	**PO4,PO5,PO6**
CO2/ K3, K4		**PO1,PO2,PO3,PO4,PO5**	**-**	**PO6**
CO3/ K4, K5	**PO3**	**PO1,PO2,PO4,PO5**	**-**	**-**
CO4/ K3, K5	**PO4**	**PO2,PO3,PO5,PO6**	**PO1**	**-**
CO5/ K2, K3	**PO5**	**PO2,PO3,PO4,PO6**	**-**	**PO1**
CO6/ K 5, K6	**PO6**	**PO2,PO3,PO4,PO5,PO6**	**-**	**PO4**

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	**C1**	**C2**	**C3**	**Total Scholastic Marks C4**	**Non Scholastic Marks C4**	**CIA**	**% of Assessment**
	T1 4 Marks	**T2 10 Marks**	**Assignment 6 Marks**	**20 Marks**	**Attendance 5 Marks**	**25 Marks**	
K1	**1**	**1**	**1**	**3**		**3**	**12**

K2	**1**	**1**	**1**	**3**		**3**	**12**
K3	**1**	**2**	**1**	**4**		**4**	**16**
K4	**1**	**2**	**1**	**4**		**4**	**16**
K5	**-**	**2**	**1**	**3**		**3**	**12**
K6	**-**	**2**	**1**	**3**		**3**	**12**
Non Scholastic	**-**	**-**	**-**	**-**		**5**	**20**
Total	**4**	**10**	**6**	**20**	**5**	**25**	**100%**

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – VI
For who joined from 2025 onwards

Programe Code	Course Code	Course Title	Category	Hrs/Week	Credits
PEUS	U25PE14	Test, Measurement & Evaluation	Theory	3	4

COURSE DESCRIPTION:

This course aims to provide students with an in-depth understanding of the fundamentals of tests, measurement, and evaluation in physical education. It covers the scientific basis and practical application of various tests used to assess physical fitness, skill performance, and motor abilities.

COURSE OBJECTIVES:

- To understand the basic concepts of human physiology related to exercise.
- To examine the function and structure of muscular, cardiovascular, and respiratory systems.
- To explore energy metabolism during rest and exercise.
- To understand physiological responses to acute and chronic exercise.
- To assess the effect of training on various body systems.

UNIT - I: INTRODUCTION TO TEST, MEASUREMENT & EVALUATION (15 hrs)

Definition, need and importance - Criteria of good test: validity, reliability, objectivity, usability -Types of measurement: formative and summative evaluation

UNIT – II – ANTHROPOMETRIC MEASUREMENTS (15 hrs)

Height, weight, arm span, chest girth, waist and hip ratio - Body composition analysis: BMI, skinfold measurement, BIA.

UNIT-III – PHYSICAL FITNESS TESTS (15 hrs)

AAHPERD Youth Fitness Test - Harvard Step Test - Cooper's 12-Minute Run/Walk Test - Kraus-Weber Test, Roger's Physical Fitness Test- Multi- Stage Fitness Test- Beep Test

UNIT-IV – MOTOR FITNESS TESTS (15 hrs)

Indiana Motor Fitness Test - Barrow Motor Ability Test - JCR Test- Oregon Motor Fitness Test- Newton Motor Ability Test

UNIT-V – SKILL TESTS (15 hrs)

McDonald's Soccer Test, Johnson Basketball Test ,Miller Wall Volley Test, Brady Volleyball Test, Friendel Field Hockey Test, Dyer Tennis Test, Sutcliff Cricket Test

TEXT BOOKS:

1. Kansal, D.K. – Test and Measurement in Sports and Physical Education, DVS Publications.

2. Dr. K. V. Iyer – Test, Measurement and Evaluation in Physical Education, Friends Publication.

Unit – I: Book 1: Chapter 1: Introduction to Test and Measurement (Pages 1–12)
Book 2: Chapter 1: Concepts and Definitions (Pages 1–10)
Unit – II: Book 1: Chapter 2: Anthropometry and Somatotyping (Pages 25–42)
Book 2: Chapter 4: Physical Fitness Testing (Pages 43–64)
Unit – III: Book 1: Chapter 2: Purpose and Classification of Tests (Pages 11–22)
Book: 2 Chapter 3: Fitness Tests for Youth and Adults (Pages 23–40)
Unit – IV: Book: 1 Chapter 5: Motor Fitness and Skill Tests
Book :2 Chapter 4: Sports Skill Testing (*Pages 41–60)*
Unit: V: Book: 1 Chapter 6: Test Construction and Administration (Pages 91–105)
Book :2 Chapter 7: Basics of Statistics (Pages 86–105)

REFERECE BOOK(S):

1. Barry L. Johnson & Jack K. Nelson – Practical Measurements for Evaluation in Physical Education.
2. Vivian H. Heyward – Advanced Fitness Assessment and Exercise Prescription.
3. Dr. P. K. Sharma – Test and Measurement in Physical Education.

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. www.pecentral.org
2. www.topendsports.com
3. YouTube channels: NAPESS India, Human Kinetics
4. Google Scholar & ResearchGate articles on fitness testing

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Understand the basic concepts of test, measurement, and evaluation.	K1 – Remembering
CO2	Select appropriate physical and motor fitness tests.	K2 – Understanding
CO3	Administer tests and interpret results accurately.	K3 – Application
CO4	Apply statistical tools in performance evaluation.	K4 – Analyzing
CO5	Design simple test batteries for school/college level programs.	K5 – Evaluating
CO6	Use digital tools for test administration and evaluation.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	0	0	0
CO2	9	3	3	3	3	0
CO3	3	3	9	3	3	0
CO4	1	3	3	9	3	3
CO5	0	3	3	3	9	3

CO6	0	3	3	3	3	9
Weightage	10%	15%	20%	15%	20%	20%

CO/K - Level	**Level of Correlation**			
	HIGH	**MEDIUM**	**LOW**	**ZERO**
CO1/ K 2, K3	**PO1**	**PO2**	**PO3**	**PO4,PO5,PO6**
CO2/ K3, K4		**PO1,PO2,PO3,PO4,PO5**	**-**	**PO6**
CO3/ K4, K5	**PO3**	**PO1,PO2,PO4,PO5**	**-**	**-**
CO4/ K3, K5	**PO4**	**PO2,PO3,PO5,PO6**	**PO1**	**-**
CO5/ K2, K3	**PO5**	**PO2,PO3,PO4,PO6**	**-**	**PO1**
CO6/ K 5, K6	**PO6**	**PO2,PO3,PO4,PO5,PO6**	**-**	**PO4**

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	**C1**	**C2**	**C3**	**Total Scholastic Marks C4**	**Non Scholastic Marks C4**	**CIA**	**% of Assessment**
	T1 4 Marks	**T2 10 Marks**	**Assignment 6 Marks**	**20 Marks**	**Attendance 5 Marks**	**25 Marks**	
K1	**1**	**1**	**1**	**3**		**3**	**12**
K2	**1**	**1**	**1**	**3**		**3**	**12**
K3	**1**	**2**	**1**	**4**		**4**	**16**
K4	**1**	**2**	**1**	**4**		**4**	**16**
K5	**-**	**2**	**1**	**3**		**3**	**12**
K6	**-**	**2**	**1**	**3**		**3**	**12**
Non Scholastic	**-**	**-**	**-**	**-**		**5**	**20**
Total	**4**	**10**	**6**	**20**	**5**	**25**	**100%**

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – VI

For who joined from 2025 onwards

Programe Code	Course Code	Course Type	Course Title	Category	Hrs/Week	Credits
PEUS	U25PEP15	Project	Martial Arts & Project Sports Meet	Practical		5

COURSE DESCRIPTION:

This practical course provides hands-on experience in planning, organizing, and executing a sports meet. It focuses on the development of managerial, technical, and officiating skills essential for physical education professionals. Students learn the practical nuances of conducting various types of sports events from grassroots to institutional levels.

COURSE OBJECTIVES:

- Plan and schedule an inter or intra-college sports meet.
- Allocate duties and responsibilities to various committees.
- Manage budgets, logistics, and facilities for event execution.
- Demonstrate proficiency in officiating and technical management.
- Apply leadership and team-building skills in a live event.

UNIT - I: INTRODUCTION TO SPORTS MEET (15 hrs)

- Types: Annual Day, Intramural, Inter-school/college
- Objectives and significance of organizing sports meets

UNIT – II – PLANNING AND PRE-EVENT MANAGEMENT (15 hrs)

- Proposal writing and budget planning
- Committee formation and delegation of responsibilities
- Preparation of event schedule, invitation, circulars

UNIT-III – TECHNICAL AND LOGISTIC ARRANGEMENTS (15 hrs)

- Ground marking, equipment procurement, registration process
- Role of officials and event-wise rules
- Emergency preparedness and medical support

UNIT-IV – CONDUCTING THE SPORTS MEET (15 hrs)

- Opening & Closing Ceremony protocols
- Execution of track & field and team events
- Role of announcers, scorers, and technical officials

UNIT-V -EVALUATION AND REPORT SUBMISSION (15 hrs)

- Score sheet maintenance and documentation
- Event feedback, result analysis
- Preparation of final report with media clippings and photos

TEXT BOOKS:

1. Kannan, P. (2023)– Sports Management, Friends Publications.
2. Bucher, C.A. (2022)– Administration of Physical Education and Athletic Programs, Prentice Hall.

REFERECE BOOK(S):

1. Chelladurai, P. (2021)– Managing Organizations for Sport and Physical Activity
2. Kamlesh, M.L. (2022)– Management Concepts in Physical Education and Sports
3. M.L. Kamlesh & S.P. Pandey (2023)– Sports Management Manual

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. www.sportsauthorityofindia.gov.in
2. YouTube: NIS Patiala, AIU Sports
3. Apps: Meet Maager, SportsEngine
4. Google Forms for registration & feedback

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Identify the key components of organizing a sports meet.	K1 – Remembering
CO2	Design and develop a workable plan for sports event execution	K2 – Understanding
CO3	Demonstrate effective management and leadership skills.	K3 – Application
CO4	Officiate and coordinate various athletic and game events.	K4 – Analyzing
CO5	Prepare technical and financial reports post-event.	K5 – Evaluating
CO6	Utilize digital tools for planning, registration, and reporting.	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	3	0	0	0
CO2	9	9	3	3	0	0
CO3	3	9	9	3	3	0
CO4	3	3	9	3	3	3
CO5	1	3	3	9	3	3
CO6	3	3	3	3	3	9
Weightage	5%	10%	25%	20%	20%	20%

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO

CO1/ K2, K3	**PO1**	**PO2,PO3**	**-**	**PO4,PO5,PO6**
CO2/ K3, K4	**PO1,PO2**	**PO3,PO4**	**-**	**PO5,PO6**
CO3/ K4, K5	**PO2,PO3**	**PO1,PO4,PO5**	**-**	**PO6**
CO4/ K3, K5	**PO3**	**PO1,PO2,PO3,PO4,PO5,PO6**	**-**	**-**
CO5/ K2, K3	**PO4**	**PO2,PO3,PO5,PO6**	**PO1**	**-**
CO6/ K5, K6	**PO6**	**PO2,PO3,PO4,PO5,PO6**	**-**	**-**

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	**C1**	**C2**	**C3**	**Total Scholastic Marks C4**	**Non Scholastic Marks C4**	**CIA**	**% of Assessment**
	T1 4 Marks	**T2 10 Marks**	**Assignment 6 Marks**	**20 Marks**	**Attendance 5 Marks**	**25 Marks**	
K1	**1**	**1**	**1**	**3**		**3**	**12**
K2	**1**	**1**	**1**	**3**		**3**	**12**
K3	**1**	**2**	**1**	**4**		**4**	**16**
K4	**1**	**2**	**1**	**4**		**4**	**16**
K5	**-**	**2**	**1**	**3**		**3**	**12**
K6	**-**	**2**	**1**	**3**		**3**	**12**
Non Scholastic	**-**	**-**	**-**	**-**		**5**	**20**
Total	**4**	**10**	**6**	**20**	**5**	**25**	**100%**

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**

SEMESTER – VI
For who joined from 2025 onwards

Programe Code	Course Code	Course Title	Category	Hrs/Week	Credits
PEUS	U25PE16E	Sports Training & Nutrition	ELECTIVE	3	4

COURSE DESCRIPTION:

This course introduces the scientific principles of sports training and the fundamentals of sports nutrition. It covers training load, periodization, performance enhancement techniques, and the role of macro- and micronutrients in athletes' diet for peak performance and recovery.

COURSE OBJECTIVES:

- To understand principles and methods of sports training.
- To gain knowledge about planning, progression, and periodization in training.
- To explore energy systems, recovery, and load management.
- To understand nutritional requirements for different sports.
- To identify the role of hydration, supplements, and diet planning.
- To evaluate the impact of training and nutrition on sports performance.

UNIT - I: BASICS OF SPORTS TRAINING (15 HRS)

Definition, aims, characteristics, principles - Types of training: strength, endurance, speed, flexibility, coordinative.

UNIT – II – TRAINING LOAD & PERIODIZATION (15 HRS)

Load: intensity, volume, frequency - Overtraining and recovery - Periodization: preparatory, competitive, transition phases- Micro,Meso,Macro

UNIT-III – ENERGY SYSTEMS & RECOVERY (15 HRS)

Aerobic and anaerobic energy pathways - Rest, sleep, active recovery - Injury prevention strategies.

UNIT-IV – INTRODUCTION TO SPORTS NUTRITION (15 HRS)

Macronutrients: Carbohydrates, proteins, fats - Micronutrients: Vitamins & minerals - Balanced diet and nutrition timing.

UNIT-V – APPLIED SPORTS NUTRITION (15 HRS)

Pre-, during-, and post-event nutrition - Hydration strategies - Ergogenic aids and supplements

TEXT BOOKS:

1. Dunford, Marie & Doyle, J. Andrew – Nutrition for Sport and Exercise
2. Hardayal Singh – Science of Sports Training

Unit – I: Book 1: Chapter 1: Chapter 1: Introduction to Sports Management Book 2: Chapter 1: Organizational Structures in Sports:

Unit – II: Book 1: Chapter 2: Event Planning and Management:
Book 2: Chapter 2: Marketing and Sponsorship in Sports:
Unit – III: Book 1: Chapter 3: Program Organization and Planning
Book: 2 Chapter 3: Future Trends in Sports Management
Unit – IV: Book: 1 Chapter 4: Foundations of Sport Management
Book :2 Chapter 4: Organizational Behavior in Sport
Unit: V: Book: 1 Chapter 5: Human Resource Management:
Book :2 Chapter 5: Strategic Planning and Decision Making

REFERECE BOOK(S):

1. Ronald Feit – Sports Injuries: Prevention, Treatment, and Rehabilitation
2. Melvin H. Williams – Nutrition for Health, Fitness, and Sport
3. Tudor Bompa – Periodization Training for Sports

DIGITAL OPEN EDUCATIONAL RESOURCES:

1. NPTEL: Sports Science and Physical Education modules
2. IOC Sports Nutrition e-learning platform
3. SWAYAM Course: Sports Training and Nutrition
4. YouTube channels: Science for Sport, Precision Nutrition

COURSE OUTCOMES:

NO	COURSE OUTCOMES	KNOWLEDGE LEVEL
CO1	Explain the scientific principles of sports training	K1 – Remembering
CO2	Classify and apply various methods of physical training	K2 – Understanding
CO3	Plan and manage sports events and facilities Analyze training load and develop basic periodized plans	K3 – Application
CO4	Identify components of sports nutrition and balanced dietary intake	K4 – Analyzing
CO5	Apply nutrition guidelines for pre-, intra-, and post-event performance	K5 – Evaluating
CO6	Evaluate the synergy between training and nutrition in optimizing performance	K6 - Creating

Mapping Cos consistency with Pos: Course Articulation Matrix:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	9	3	1	3	1	1
CO2	3	9	9	9	9	3
CO3	3	3	9	3	9	3
CO4	1	3	3	3	9	3
CO5	1	1	1	9	3	9

CO6	1	1	9	0	9	9
Weightage	10%	15%	15%	20%	20%	20%

CO/K - Level	Level of Correlation			
	HIGH	MEDIUM	LOW	ZERO
CO1/K1/K2	PO1	PO2,PO4	PO3,PO5,PO6	-
CO2/K2/K3	PO2,PO3,PO4,PO5	PO1,PO6	-	-
CO3/K3/K4	PO3,PO5	PO1,PO2,PO4,	PO1,PO2,PO4,PO	-
CO4/K4/K5	PO5	PO2,PO3,PO4,PO6	PO1	-
CO5/K5/K6	PO1,PO6	PO5	PO3	-
CO6/K6	PO3,PO5,PO6	PO1,PO2	-	PO4

Course outcome (co) attainment assessment tools & evaluation procedure

K Levels	C1	C2	C3	Total Scholastic Marks C4	Non Scholastic Marks C4	CIA	% of Assessment
	T1 4 Marks	T2 10 Marks	Assignment 6 Marks	20 Marks	Attendance 5 Marks	25 Marks	
K1	1	1	1	3		3	12
K2	1	1	1	3		3	12
K3	1	2	1	4		4	16
K4	1	2	1	4		4	16
K5	-	2	1	3		3	12
K6	-	2	1	3		3	12
Non Scholastic	-	-	-	-		5	20
Total	4	10	6	20	5	25	100%

The Cos and Pos for the differential calculus and Trigonometry course in the B.Sc Physical Education Programme is Effectively matched by the course In- charge.

Signature of the Course In – charge **Signature of the HOD**