GURU KASHI UNIVERSITY

Bachelor of Physical Education and Sports (BPES)

Interdisciplinary

Session: 2025-26

Faculty of Physical Education

Graduate Attributes of the Programme:-

Types of learning outcomes	**The Learning Outcomes Descriptors**
Graduates should be able to demonstrate the acquisition of:	
Learning outcomes that are specific to interdisciplinary areas of learning	❖ Apply scientific knowledge (anatomy, physiology, science) to enhance physical performance and safety.
	❖ Use educational technology for effective teaching and training in physical education.
	❖ Understand sociocultural factors influencing sports through history and sociology.
	❖ Develop administrative and business skills for managing sports programs.
	❖ Communicate through journalism to promote sports and physical education.
	❖ Promote wellness and ethics in personal and professional contexts.
	❖ Demonstrate physical competence through practical training and techniques.
	❖ Bridge language and culture to make physical education inclusive and locally relevant.
Generic learning outcomes	❖ Critical Thinking and Problem Solving, Develop the ability to analyze issues, think critically, and solve problems effectively in academic and real-life situations.
	❖ Effective Communication, Communicate ideas clearly and confidently through oral, written, and digital formats.

	❖ Teamwork and Leadership, Collaborate with others in diverse teams, showing leadership and interpersonal skills.
	❖ Ethical and Social Responsibility, Demonstrate ethical behavior, respect for others, and an understanding of social responsibilities.
	❖ Adaptability and Lifelong Learning, Adapt to new situations, technologies, and knowledge, showing readiness for lifelong learning.
	❖ Self-Management and Discipline Manage time, resources, and personal well-being efficiently, with a strong sense of discipline and, accountability.
	❖ Creativity and Innovation, Apply creative thinking and innovative approaches to tasks, projects, and challenges.
	❖ Digital and Technological Competence, Use digital tools and technologies effectively for learning, communication, and problem-solving.

Programme Learning Outcomes: An Undergraduate Certificate is awarded to students who have demonstrated the achievement of the outcomes located at level 5.5

Element of the Descriptor	Programme learning outcomes relating to Undergraduate Certificate
The graduate should be able to demonstrate the acquisition of:	
Knowledge and understanding	❖ Demonstrate foundational understanding of physical education, human anatomy, physiology, health, wellness, sports sociology, and relevant administrative practices.
General, technical and professional skills required to perform and accomplish tasks	❖ Acquire skills in calisthenics, track events, lesson planning, sports event organization, journalism in sports, and the use of educational technology in physical education.
Application of knowledge and skills	❖ Apply interdisciplinary knowledge in real-world physical education settings including schools, fitness centers and community health programmes.
Generic learning outcomes	❖ Exhibit communication, critical thinking, teamwork, digital literacy, adaptability, and leadership, applicable across diverse professional and social contexts.
Constitutional, humanistic, ethical and moral values	❖ Promote values of equality, discipline, respect, and integrity while supporting environmental and social responsibility through sports and wellness education.
Employability and job-ready skills and entrepreneurship skills and capabilities/qualities and mindset	❖ Develop job-ready competencies for roles such as physical education assistant, fitness trainer, event coordinator, or health promoter, along with basic entrepreneurial skills.
Credit requirements	❖ Semester-I= 24 credits ❖ Semester-II= 24 credits ❖ Internship= 4 Credits ❖ **Total= 52 credits** for the Undergraduate Certificate.
Entry requirements	❖ Passed **10+2** or equivalent qualification with at least 50% in the aggregate.

Programme Structure

SEMESTER-1st									
Course Code	**Course Title**	**Type of Course**	**L**	**T**	**P**	**No. of Credits**	**Int. Ass.**	**Ext. Ass.**	**Total**
BPE1100	Introduction and Development of Physical Education	Core Course	4	0	0	4	30	70	100
BPE1101	Human Anatomy and Physiology	Core Course	4	0	0	4	30	70	100
BPE1102	Organization and Administration in Physical Education	Core Course	4	0	0	4	30	70	100
BPE1103	Health and Wellness	Minor Course	2	0	0	2	30	70	100
BPE1104	Calisthenics	Skill Enhancement Course	0	0	6	3	30	70	100
BPE1105	Journalism	Multidisciplinary Course	3	0	0	3	30	70	100
VAC0001	Environment Education	Value Added Course	2	0	0	2	30	70	100
Elective-I (Opt any one of the following)									
BPE1106	Punjabi-I	Ability Enhancement Course-I	2	0	0	2	30	70	100
BPE1107	Punjab History and Culture-I (Earliest Times to 1000 A.D.)								
Total			**21**	**0**	**6**	**24**	**240**	**560**	**800**

SEMESTER-2nd									
Course Code	**Course Title**	**Type of Course**	**L**	**T**	**P**	**No. of Credits**	**Int. Ass.**	**Ext. Ass.**	**Total**
BPE2150	Educational Technology in Physical Education	Core Course	4	0	0	4	30	70	100
BPE2151	General Science	Core Course	4	0	0	4	30	70	100
BPE2152	Methods of Physical Education	Core Course	4	0	0	4	30	70	100
BPE2153	Sports Sociology	Minor Course	2	0	0	2	30	70	100
BPE2154	Athletics (Track Events)	Skill Enhancement Course	0	0	6	3	30	70	100
BPE2155	Business and Marketing	Multidisciplinary Course	3	0	0	3	30	70	100
VAC0002	Human Values and Professional Ethics	Value Added Course	2	0	0	2	30	70	100
Elective-II (Opt any one of the following)									
BPE2156	Punjabi-II	Ability Enhancement Course-II	2	0	0	2	30	70	100
BPE2157	Punjab History and Culture-II (1000 to 1849 A.D.)								
Total			**21**	**0**	**6**	**24**	**240**	**560**	**800**

Programme Learning Outcomes: An Undergraduate Diploma is awarded to students who have demonstrated the achievement of the outcomes located at level 5.5

Element of the Descriptor	Programme learning outcomes relating to Undergraduate Diploma
The graduate should be able to demonstrate the acquisition of:	
Knowledge and understanding	❖ Students will gain foundational knowledge in exercise physiology, sports psychology, nutrition, athletic care, sports coaching, and management. They will also understand the role of yoga, media, and health sciences in physical education.
Genera, technical and professional skills required to perform and accomplish tasks	❖ Graduates will develop skills in fitness assessment, injury rehabilitation, field events, yoga practice, and sports officiating. They will also enhance communication, leadership, and teamwork abilities through English and leadership training.
Application of knowledge and skills	❖ They will be able to apply their knowledge to design fitness programs, support athletic rehabilitation, conduct tests, and manage sports events, combining theory with hands-on practice.
Generic learning outcomes	❖ Graduates will improve their critical thinking, problem-solving, and interpersonal skills, which are essential for both academic and professional growth.
Constitutional, humanistic, ethical and moral values	❖ They will embody values like discipline, ethics, fairness, and social responsibility, promoted through the study of yoga, leadership, and health science.
Employability and job-ready skills and entrepreneurship skills and capabilities/qualities and mindset	❖ Prepared for jobs in fitness training, sports coaching, yoga instruction, rehabilitation, and sports management. They will also gain entrepreneurial skills to start fitness centers, yoga studios, or health programs.

Credit requirements	❖ Semester 1 & 2: **48 credits** ❖ Semester 3 & 4: **44 credits** ❖ Internship: **4 credits** ❖ Total for Diploma (typically 2 years): **96 credits**
Entry requirements	❖ Passed **10+2** or equivalent qualification with at least 50% in the aggregate.

SEMESTER-3rd									
Course Code	**Course Title**	**Type of Course**	**L**	**T**	**P**	**No. of Cre.**	**Int. Ass.**	**Ext. Ass.**	**Total**
BPE3200	Test, Measurement and Evaluation in Physical Education	Core Course	4	0	0	4	30	70	100
BPE3201	Athletic Care and Rehabilitation	Core Course	4	0	0	4	30	70	100
BPE3202	Sports Psychology	Core Course	4	0	0	4	30	70	100
BPE3203	Sports Nutrition and Weight Management	Minor Course	2	0	0	2	30	70	100
BPE3204	Athletics (Field Events)	Skill Enhancement Course	0	0	6	3	30	70	100
BPE3205	Leadership Skills	Multidisciplinary Course	3	0	0	3	30	70	100
BPE3206	General English	Ability Enhancement Course	2	0	0	2	30	70	100
Total			**19**	**0**	**6**	**22**	**210**	**490**	**700**

SEMESTER-4th									
Course Code	**Course Title**	**Type of Course**	**L**	**T**	**P**	**No. of Credits**	**Int. Ass.**	**Ext. Ass.**	**Total**
BPE4250	Exercise Physiology	Core Course	4	0	0	4	30	70	100
BPE4251	Officiating and Coaching	Core Course	4	0	0	4	30	70	100
BPE4252	Sports Management	Core Course	4	0	0	4	30	70	100
BPE4253	Physical Fitness Assessment and Evaluation	Minor Course	2	0	0	2	30	70	100
BPE4254	Yoga (Theory)	Vocational Course	2	0	0	2	30	70	100
BPE4255	Yoga (Practical)	Vocational Course	0	0	4	2	30	70	100
IKS0006	Indian Health Sciences	Value Added Course	2	0	0	2	30	70	100
BPE4256	Media and Mass Communication	Ability Enhancement Course	2	0	0	2	30	70	100
Total			**20**	**0**	**4**	**22**	**240**	**560**	**800**

Programme Learning Outcomes: The Bachelor's degree is awarded to students who have demonstrated the achievement of the outcomes located at level 5.5

Element of the Descriptor	Element of the Descriptor Programme learning outcomes relating to Bachelor Degree
The graduate should be able to demonstrate the acquisition of:	
Knowledge and understanding	❖ Strong knowledge in Kinesiology, Sports, Medicine, Biomechanics, Sports Training,, Statistics, and related fields
Genera, technical and professional skills required to perform and accomplish tasks	❖ Skills in coaching, fitness management, remedial therapy, athletics event handling and performance analysis
Application of knowledge and skills	❖ Apply scientific principles to enhance athletic performance, design fitness programs and analyze sports data.
Generic learning outcomes	❖ Development of critical thinking, communication, leadership, and teamwork skills.
Constitutional, humanistic, ethical and moral values	❖ Promotion of fairness, integrity, social responsibility and ethical practices in sports.
Employability and job-ready skills and entrepreneurship skills and capabilities/qualities and mindset	❖ Careers in sports training, fitness centers, rehabilitation, and sports management. ❖ Entrepreneurship opportunities in sports academies and fitness businesses.
Credit requirements	❖ Semesters 1-4: **92 Credits** ❖ Semesters 5-6: **46 Credits** ❖ Total: **138 Credits** for complete degree
Entry requirements	❖ Passed **10+2** or equivalent qualification with at least 50% in the aggregate.

SEMESTER-5th									
Course Code	**Course Title**	**Type of Course**	**L**	**T**	**P**	**No. of Credits**	**Int. Ass.**	**Ext. Ass.**	**Total**
BPE5300	Kinesiology	Core Course	4	0	0	4	30	70	100
BPE5301	Basics of Sports Training	Core Course	4	0	0	4	30	70	100
BPE5302	Remedial and Massage	Core Course	4	0	0	4	30	70	100
BPE5303	Olympic Movement	Minor Course	2	0	0	2	30	70	100
BPE5304	Athletics (Theory Track Events)	Vocational Course	2	0	0	2	30	70	100
BPE5305	Athletics (Practical Track Events)	Vocational Course	0	0	4	2	30	70	100
BPE5306	Internship (6 Week)	Skill Based	0	0	0	4	30	70	100
Total			**16**	**0**	**4**	**22**	**210**	**490**	**700**

SEMESTER-6th									
Course Code	**Course Title**	**Type of Course**	**L**	**T**	**P**	**No. of Credits**	**Int. Ass.**	**Ext. Ass.**	**Total**
BPE6350	Sports Medicine	Core Course	4	0	0	4	30	70	100
BPE6351	Basic Statistics in Physical Education and Sports	Core Course	4	0	0	4	30	70	100
BPE6352	Biomechanics	Core Course	4	0	0	4	30	70	100
BPE6353	Fitness Centre Management	Minor Course	2	0	0	2	30	70	100
BPE6354	Practical Applications in Test and Measurement (Theory)	Vocational Course	2	0	0	2	30	70	100
BPE6355	Practical Applications in Test and Measurement (Practical)	Vocational Course	0	0	4	2	30	70	100
BPE6356	Games & Sports (Theory)	Skill Based	2	0	0	2	30	70	100
BPE6357	Games & Sports (Practical)	Skill Based	0	0	4	2	30	70	100
IKS0009	Indian Agriculture	Value Added Course	2	0	0	2	30	70	100
Total			**20**	**0**	**8**	**24**	**270**	**630**	**900**

Programme learning outcomes: The Bachelor's degree (Honours with Research) or the Post-Graduate Diploma is awarded to students who have demonstrated the achievement of the outcomes located at level 5.5

Element of the Descriptor	Programme learning outcomes relating to Bachelor Degree (Honours with Research)
The graduate should be able to demonstrate the acquisition of:	
Knowledge and understanding	❖ In-depth understanding of Anthropometry (body measurements), Sports Business & Management, and Statistics in sports. ❖ Awareness of research methodologies, alternative and emerging sports, and disability sports & Paralympics. ❖ Theoretical and practical knowledge of Gymnastics and field-based anthropometric testing
Genera, technical and professional skills required to perform and accomplish tasks	❖ kills to conduct anthropometric field tests and apply scientific methods to sports performance. ❖ Proficiency in gymnastics techniques (theory & practice). ❖ Experience in data analysis, research writing, and sports management operations. ❖ Leadership through service-learning projects and dissertation work.
Application of knowledge and skills	❖ Ability to apply research methods to design and complete a dissertation addressing real-world sports issues. ❖ Practical skills to conduct field-based measurements, evaluate sports performance data, and develop management strategies for sports businesses.
Generic learning outcomes	❖ Strong research aptitude and critical thinking abilities. ❖ Enhanced communication, collaboration, and problem-solving skills. ❖ Development of time management and self-discipline through independent dissertation work.
Constitutional, humanistic, ethical and moral values	❖ Embrace ethical research practices, inclusive sports culture, and social responsibility, particularly in relation to disability sports and Paralympics.

	❖ Promote equity, fair play, and human dignity in all sports activities.
Employability and job-ready skills and entrepreneurship skills and capabilities/qualities and mindset	❖ Ready for roles in sports research, data analytics, sports management, fitness assessment, and consultancy. ❖ Skills to lead sports business ventures, manage sports organizations, or work in academia. ❖ Entrepreneurship mindset to launch sports startups or innovative programs in sports science.
Credit requirements	❖ Semester 1-6: **138 credits** ❖ Semester 7-8: **46 credits** ❖ Total Credits for Honours with Research Degree: **184 credits** across 8 semesters.
Entry requirements	❖ Passed **10+2** or equivalent qualification with at least 50% in the aggregate.

SEMESTER-7th									
Course Code	**Course Title**	**Type of Course**	**L**	**T**	**P**	**No. of Credits**	**Int. Ass.**	**Ext. Ass.**	**Total**
BPE7400	Anthropometry	Core Course	4	0	0	4	30	70	100
BPE7401	Sports Business & Management	Core Course	4	0	0	4	30	70	100
BPE7402	Anthropometry Field Testing	Practicum Couse	0	0	8	4	30	70	100
BPE7403	Gymnastics (Theory)	Vocational Course	2	0	0	2	30	70	100
BPE7404	Gymnastics (Practical)	Vocational Course	0	0	4	2	30	70	100
Discipline Elective-III (Opt any one of following)									
BPE7405	Alternative and Emerging Sports	Discipline Elective-III	4	0	0	4	30	70	100
BPE7406	Disability Sports and Paralympics Studies								
Total			**14**	**0**	**12**	**20**	**180**	**420**	**600**

SEMESTER-8th									
Course Code	**Course Title**	**Type of Course**	**L**	**T**	**P**	**No. of Credits**	**Int. Ass.**	**Ext. Ass.**	**Total**
BPE8450	Statistics in Physical Education and Sports	Core Course	4	0	0	4	30	70	100
BPE8451	Service Learning	Skill Based	0	0	8	4	30	70	100
BPE8452	Research Methodology	Research Based	4	0	0	4	30	70	100
BPE8453	Dissertation	Research Skill	0	0	0	12	30	70	100
Total			**8**	**0**	**8**	**24**	**120**	**280**	**400**
Grand Total			**139**	**0**	**54**	**179**			

Semester-I

Course Name: Introduction and Development of Physical Education	L	T	P	Cr.
Course Code: BPE1100	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Compare the interplay between general education and physical education.
2. Identify and relate to the historical developments in the field of Physical Education.
3. Comprehend the connections between Philosophy, Education, and Physical Education.
4. Recognize the contributions of philosophers in the realms of Education and Physical Education.

Course Content

UNIT-I **14 Hours**

Introduction to Physical Education: Meaning, Definition and Scope of Physical Education, Aim and Objectives of Physical Education, Importance of Physical Education in present era, Misconceptions about Physical Education, Relationship of Physical Education with General Education, Physical Education as an Art and Science.

UNIT-II **16 Hours**

Historical Development of Physical Education in India: Vedic Period (2500 BC –600 BC), Early Hindu Period (600 BC – 320 AD) and Later Hindu Period (320 AD – 1000 AD), Medieval period, Post Mughal British Period (Before 1947) Y.M.C.A. and its contributions Physical Education in India (After 1947)

The early history and significant stages in the revival and development of the modern Olympic movement, Educational and cultural values of Olympic movement.

UNIT-III **15 Hours**

Philosophical Foundation of Physical Education: Idealism, Pragmatism, Naturalism, Realism Philosophy and Culture

Fitness and wellness movement in the contemporary perspectives, Sports for all and its role in the maintenance and promotion of fitness.

UNIT-IV **15 Hours**

Foundation of Physical Education Biological: Growth and development, Age and gender characteristics, Body Types

Psychological: Attitude, interest, Cognition, emotions and sentiments, Practical Suggestion from psychology.

Sociological: Society and culture, social acceptance and recognition, Leadership in physical education.

Transaction Mode:

Lecture, Seminar, e Team Teaching, e Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Bucher, C. A. (n.d.)- Foundation of physical education. St. Louis: The C.V. Mosby Co*
- *Deshpande, S. H. (2014) - Physical Education in Ancient India. Amravati: Degree college of Physical education*
- *Dash, B. N. (2003.) Principles of Education, Neelkamal publication, Hyderabad.*
- *Kamlesh, M.L. (2002) –Sociological Foundation of Physical Education, Metropolitan Book co. Pvt. Ltd., Delhi,*
- *Pandey, R. S. (1991) Philosophical & Sociological Foundation of Education, Vinod Pustak Mandir, Agra,*
- *Bhatia, K. K. & Narang, C. L. (1984)–Philosophical & Sociological Bases of Education, Prakash Bros., Ludhiana,*
- *Adams, William. C (1991.)–Foundation of Physical Education Exercises and Sports Sciences, Lea and Febigor, Philadelphia,*
- *Dr. Kamlesh M.L. (2004)-Principles and History of Physical Education and Sports, Friends Publication (India) New Delhi.*
- *Dr. B. C. Kapri, Fundamentals of Physical Education, Friends Publication, Dariya Ganj, Delhi (India)*

Course Name: Human Anatomy & Physiology	L	T	P	Cr.
Course Code: BPE1101	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Explain the significance and relevance of anatomy in the context of physical education.
2. Describe the fundamental structure, composition, and functions of the various organ systems in the human body.
3. Demonstrateproficiencyinusingtheessentialtechnicalterminologyand language specific to anatomy
4. Defend the distinctive and remarkable features of the human anatomical structure.

Course Content

UNIT-I **16 Hours**

Introduction: Meaning and definition of Anatomy and physiology, anatomical position, need and importance of Anatomy in physical education and sports
Cell: cell division, Structure, Function of cell, Tissue and its type

UNIT-II **15 Hours**

Introduction to Muscular system,
Muscular System: Meaning, types and structure of muscles and their functions
Skeletal System: Meaning, types of bones, Different parts of human Skeletal System.
Joints: Structure of the skeletal, Classification of joints and their movements

UNIT-III **14 Hours**

Cardiovascular System/Circulatory System: Structure and function of the heart, Blood, blood pressure, Stroke volume, heart rate, cardiac output and Cardiac cycle.
Respiratory System: Structure and function of the Respiratory System types of Respiration, Vital capacity, tidal volume, lung capacity, pulmonary ventilation, Oxygen debt, second wind.

UNIT-IV **15 Hours**

Digestive system: Structure and function of the Digestive System
Excretory system: Structure and function of the Excretory System Organs of Excretory system (Skin, kidney, lungs etc)

Nervous System: Structure and function of the Nervous System (Brain, Spial Cord)

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Singh, Ajmer., Bains, Jagdish., Gill, Jagtar Singh. And Brar, Rashpal Singh (2017) "Essential of physical Education" Kalyani Publisher, Ludhiana, Punjab.*
- *Gerard, J. Tortora and Bryan, H. Derrickson. (2014), "Principles of Anatomy and Physiology"14thedition – John Wiley and Sons, USA.*
- *Albert Bluisdall (2001), Human Anatomy and Physiology, Sports Publication, Darya Ganj New Delhi.*
- *Roseand Wilson (2001), Anatomy and Physiology in Health Illness 9th edition- Harcourt Publisher Ltd.*
- *Winwood, R.S. and Smith, J. L. (1998) Sears Anatomy and Physiology for Nurses 6thedition (1stIndian edition), London Edward Arnold.*
- *Gray A. Thibodean and Kelvin T. Patton (1994), Anthony's Textbooks of Anatomy and Physiology, 14thedition Mosby year book inc. St. Louis Times Mirror, Mosby College Publishing*

Course Name: Organization and Administration in Physical Education	L	T	P	Cr.
Course Code: BPE1102	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Define the key concepts and scope of physical education administration.
2. Recognize the importance and objectives of physical education programs in educational institutions.
3. Identify the organizational structure of physical education departments.
4. Explain the roles and responsibilities of the physical education director, staff and other stakeholders.

Course Content

UNIT-I **14 Hours**

Definition and Scope of Administration in Physical Education, Key principles and objectives of Administration in Physical Education, Evolution and importance of Physical Education programs in schools and colleges.

UNIT-II **16 Hours**

Structure of Physical Education departments in schools/colleges, Roles and responsibilities of the Physical Education Director, Hierarchical organization and management of sports events, Resource management (facilities, equipment and human resources)

UNIT-III **15 Hours**

Planning and organizing physical education programs, financial management, budgeting and resource allocation, Policy formulation for physical education and sports activities, Importance of record-keeping and documentation

UNIT-IV **15 Hours**

Leadership and supervisory roles in Physical Education, Event planning and administration in sports, Communication and coordination with stakeholders (athletes, coaches and administrators), Managing sports competitions and understanding legal aspects of sports management

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Vohra, B. P. (2010). Principles of Physical Education and Sports Management. Surjeet Publications.*
- *Thomas, D. K., & Nelson, T. L. (2001). Organization and Administration of Physical Education (6th Ed.). McGraw-Hill Education.*
- *Watt, D. C., & Golden, K. L. (2014). Sports Administration: A Practical Guide. Routledge.*
- *Skinner, J., Edwards, R., & Johnson, J. H. (2015). Sports Management: Principles and Applications (3rd Ed.). Human Kinetics.*
- *Morris, J. P. T. (2003). Physical Education and Sports Management. Prentice Hall.*
- *Siedentop, D. (2009). Introduction to Physical Education, Fitness, and Sport (7th Ed.). McGraw-Hill Education.*
- *Mahy, B. M. (2016). Sports Event Management: The Caribbean Experience. Routledge.*
- *Hargreaves, S. M. (2004). Management of Sports and Physical Education. Human Kinetics.*
- *Brooks, R. D. (2014). Leadership in Sports Organizations. Pearson Education.*

Course Name: Health and wellness	L	T	P	Cr.
Course Code: BPE1103	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Define and understand the core concepts of health and wellness across multiple dimensions.
2. Recognize the significance of physical fitness and exercise in maintaining health.
3. Apply nutritional knowledge to make healthy food choices and maintain a balanced diet.
4. Develop strategies for managing mental and emotional health to enhance overall wellness.

Course Content

UNIT-I **08 Hours**

Concepts of Health and Wellness: Definitions and dimensions (physical, emotional, mental, social and spiritual).

Holistic Approach to Health: Interconnectedness of body, mind, and spirit.

Determinants of Health: Genetics, lifestyle, environment and access to healthcare.

UNIT-II **08 Hours**

Importance of Physical Activity: Benefits of regular exercise for overall health.

Components of Fitness: Cardiovascular endurance, muscular strength, flexibility, body composition.

Exercise Guidelines: Recommendations for physical activity based on age, fitness levels and health goals.

Prevention of Physical Health Issues: Prevention of lifestyle-related diseases through fitness and exercise.

Unit III **08 Hours**

Basic Principles of Nutrition: Macronutrients, micronutrients and their role in health.

Healthy Eating Habits: Creating balanced meal plans, understanding portion control and nutritional choices.

Hydration and its Importance: Role of water and proper hydration in health.

Special Diets and Trends: Impact of popular diets (e.g., vegetarian, low-carb, intermittent fasting) on health and wellness.

UNIT-IV **06 Hours**

Mental Wellness: Importance of mental health for overall well-being.

Stress Management: Techniques for managing stress, anxiety and emotional challenges.

Building Emotional Intelligence: Recognizing, understanding and managing emotions for better health.

Creating a Positive Lifestyle: Promoting happiness, resilience and healthy relationships for emotional wellness.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Corbin, C. B., Lindsey, R., & Welk, G. J. (2013). Concepts of Fitness and Wellness: A Comprehensive Lifestyle Approach (11th Ed.). McGraw-Hill Education.*
- *Pescatello, L. S., Arena, R., Riebe, D., & Thompson, P. D. (2014). ACSM's Guidelines for Exercise Testing and Prescription (9th Ed.). Wolters Kluwer.*
- *Hales, D. (2013). An Invitation to Health: Live It Now! (15th Ed.). Cengage Learning.*
- *Hoeger, W. W. K., & Hoeger, S. A. (2016). Principles of Physical Fitness (12th Ed.). Cengage Learning.*
- *Garcia, J. P. (2014). Nutrition for Health and Wellness (4th Ed.). Cengage Learning.*

Course Name: Calisthenics (SEC)	L	T	P	Cr.
Course Code: BPE1104	0	0	6	3

Total Hours: 90

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Master basic to advanced calisthenics exercises, including push-ups, squats, and handstands.
2. Develop strength, coordination and endurance through bodyweight exercises.
3. Progress to advanced movements like muscle-ups and pistol squats with proper form and technique.
4. Improve overall fitness by integrating conditioning circuits, plyometric, and flexibility training.

Course Content

Warm-Up & Mobility: Upper Body Strength, Lower Body Strength and Core Stability

Practical Application: Perform each exercise with proper technique and progressively increase repetitions or duration.

Intermediate Calisthenics Movements: Upper Body: Diamond Push-Ups, Pull-Ups (if available) and **Dips:** Bench dips or parallel bar dips.

Handstand Progressions

Archer Push-Ups

Muscle-Ups (Progressions)

Plyometric & Explosive Movements

Box Jumps: Vertical jump development.

Broad Jumps: Horizontal jump training for distance.

Clapping Push-Ups: Explosive push-up variation for upper body power.

Speed & Agility, Full-body explosive movement combining squat, push-up, and jump.

Conditioning & Endurance Training

Course Name: Journalism (MDSC)	L	T	P	Cr.
Course Code: BPE1105	3	0	0	3

Total Hours: 45

Course Learning Outcomes: Upon successful completion of the Journalism course, students will be able to:

1. Understand the role of journalism in society and its ethical and legal responsibilities.
2. Develop the skills to write news stories, conduct interviews and research sources.
3. Apply journalistic writing styles and formats to create news articles, features and opinion pieces.
4. Analyze the impact of media on public opinion and the influence of digital technologies on journalism.

Course Content

UNIT-I **12 Hours**

Definition and Role of Journalism: Understanding the role of journalism in society and its functions.

History and Evolution of Journalism: A brief history of journalism and its development from print to digital.

Types of Journalism: Print journalism, broadcast journalism (television and radio) and digital journalism.

UNIT-II **12 Hours**

Basics of News Reporting: Gathering information, interviewing and verifying facts.

Writing News Stories: Structure of a news report – inverted pyramid, lead writing and developing a compelling story.

Types of News: Hard news, feature stories, investigative journalism and soft news.

UNIT-III **12 Hours**

Role of Media in Society: How media shapes public opinion, culture and politics.

Media Ownership and Control: Exploring media conglomerates, corporate influence and the impact on journalism.

Freedom of the Press: Press freedom, its importance in a democratic society and challenges like censorship and government control.

UNIT-IV **9 Hours**

Digital Journalism: The transformation of journalism in the digital age; online news platforms, blogs, podcasts and digital reporting.

Social Media and Journalism: The role of social media platforms in reporting and their influence on traditional journalism.

Citizen Journalism: The rise of non-professional reporting and the ethical challenges and credibility issues involved.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested References:

- *McQuail, D. (2010). McQuail's Mass Communication Theory (6th ed.). SAGE Publications.*
- *Kovach, B., & Rosenstiel, T. (2014). The Elements of Journalism: What Newspeople Should Know and the Public Should Expect (3rd ed.). Crown Publishing Group.*
- *Tuggle, C. A., & Hurlbert, D. (2015). Broadcast News Writing, Reporting, and Producing (8th ed.). Pearson.*
- *Bovée, C. L., & Thill, J. V. (2014). Business Communication Today (13th ed.). Pearson.*
- *Ray, B., & Kaur, N. (2008). Journalism in the Digital Age. Kanishka Publishers.*
- *Cohen, A. (2010). The News: A User's Manual. Vintage Books.*

Course Name: Environmental Education (VAC)	L	T	P	Cr.
Course Code: VAC0001	2	0	0	2

Total Hours: 30

Course Learning Outcomes: By the end of this course, students will be able to:

1. Grasp the concept of Environmental Science, its components, types of natural resources, their distribution and usage, with a focus on India.
2. Discuss the factors impacting biodiversity loss and ecosystem degradation in India and the world.
3. An overview of Contemporary Environmental Issues i.e National and Global efforts to address climate change adaptation and mitigation.
4. To understand environmental laws for monitoring pollution.
5. Principles guiding human responsibility toward the environment.
6. Toxic chemicals and analytical methods for monitoring environmental pollutants.

Course Content

UNIT-I **6 Hours**

Human - Environment Interaction, Natural Resources and Sustainable Development

The man-environment interaction: Humans as hunter-gatherers; Mastery of fire; Origin of agriculture; Emergence of city-states; Great ancient civilizations and the environment, Indic Knowledge and Culture of sustainability; Middle Ages and Renaissance; Industrial revolution and its impact on the environment; Population growth and natural resource exploitation; Global environmental change.

Environmental Ethics and emergence of environmentalism: Anthropocentric and eco-centric perspectives (Major thinkers); The Club of Rome- Limits to Growth; UN Conference on Human Environment 1972; World Commission on Environment and Development and Rio Summit.

Natural resources: Definition and Classification. Microbes as a resource; Status and challenges. Environmental impact of over-exploitation, issues and challenges; Water scarcity and Conflicts over water. Mineral resources and their exploitation; Environmental problems due to extraction of minerals and use; Soil as a resource and its degradation.

Energy resources: Sources and their classification. Implications of energy use on the environment. Introduction to sustainable development: Sustainable Development Goals (SDGs)- targets and indicators, challenges and strategies for SDGs.

UNIT-II **6 Hours**

Biodiversity Conservation and Environmental Issues

Biodiversity as a natural resource; Levels and types. Biodiversity in India and the world; Biodiversity hotspots; Species and ecosystem threat categories. Major ecosystem types in India, their services, classification, significance and characteristics of forests, wetlands, grasslands, agriculture, coastal and marine;

Threats to biodiversity and ecosystems: Land use and land cover change; Commercial exploitation of species; Invasive species; Fire, disasters and climate change.

Major conservation policies: in-situ and ex-situ approaches; National and International Instruments for biodiversity conservation; the role of traditional knowledge, community-based conservation; Gender and conservation.

Environmental issues and scales: micro-, meso, synoptic and planetary scales; Temporal and spatial extents of local, regional, and global phenomena. Pollution: Types of Pollution air, noise, water, soil, thermal, radioactive municipal solid waste, hazardous waste; transboundary air pollution; acid rain; smog.

Land use and Land cover change: land degradation, deforestation, desertification, urbanization.

Biodiversity loss: past and current trends, impact.

Global change: Ozone layer depletion; Natural Disasters Natural and Man-made (Anthropogenic).

UNIT-III **8 Hours**

Environmental Pollution, Health, Climate Change: Impacts, Adaptation and Mitigation

Definition of pollution; Point and non-point sources.

Air pollution: sources, Impacts, Primary and Secondary pollutants; Criteria pollutants carbon monoxide, lead, nitrogen oxides, ground-level ozone, particulate matter and sulphur dioxide; Other important air pollutants- Volatile Organic compounds (VOCs), Peroxyacetyl Nitrate (PAN), Polycyclic aromatic hydrocarbons (PAHs) and Persistent organic pollutants (POPs); Indoor air pollution; National Ambient Air Quality Standards.

Water pollution: Sources; River, lake and marine pollution, groundwater pollution, impacts; Water quality parameters and standards.

Soil pollution: sources and pollutants. Solid and hazardous waste, its impacts.

Noise pollution: Definition, Unit of measurement, sources, noise standards; adverse impacts.

Thermal and Radioactive pollution: Sources and impacts.

Climate change: natural variations in climate due to greenhouse gas emission- past, present & future. Structure of atmosphere. Projections of global climate change with special reference to temperature, rainfall, climate variability and extreme events; Importance of 1.5 °C and 2.0 °C limits to global warming; Climate change projections for the Indian sub-continent.

Impacts, vulnerability and adaptation to climate change: Observed impacts of climate change on ocean and land systems; Sea level rise, changes in marine and coastal ecosystems; Impacts on forests, natural ecosystems, animal species, agriculture, health, urban infrastructure; the concept of vulnerability and its assessment; Adaptation vs. resilience; Climate-resilient development; Indigenous knowledge for adaptation to climate change.

Mitigation of climate change: Synergies between adaptation and mitigation measures; Green House Gas (GHG) reduction vs. sink enhancement; Concept of carbon intensity, energy intensity and carbon neutrality; National and international policy instruments for mitigation, decarbonizing pathways and net zero targets for the future; Energy efficiency measures; Carbon capture and storage, National climate action plan and Intended Nationally Determined Contributions (INDCs); Climate justice.

UNIT-IV **10 Hours**

Environment Management, Treaties and Legislation

Introduction to environmental laws and regulation: Article 48A, Article 51A (g) and other environmental rights; Introduction to environmental legislations on the forest, wildlife and pollution control. Environmental management system: ISO 14001 Concept of Circular Economy, Life cycle analysis; Cost-benefit analysis Environmental audit and impact assessment; Environmental risk assessment Pollution control and management; Waste Management-Concept of 3R (Reduce, Recycle and Reuse) and sustainability; Ecolabeling/Ecomark scheme. Bilateral and multilateral agreements on international co-operation of instruments; conventions and protocols; binding and nonbinding measures; Conference of the Parties (COP) Major **International Environmental Agreements:** Convention on Biological Diversity (CBD); Cartagena Protocol on Biosafety; Nagoya Protocol on Access and Benefit-sharing; Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES); Ramsar Convention on Wetlands of International Importance; United Nations Convention to Combat Desertification (UNCCD); Vienna Convention for the Protection of the Ozone Layer; Montreal Protocol on Substances that Deplete the Ozone Layer and the Kigali Amendment; Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal; Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade; Stockholm Convention, Minamata

Convention, United Nations Framework Convention on Climate Change (UNFCCC); Kyoto Protocol; Paris Agreement; India's status as a party to major conventions

Major Indian Environmental Legislations: The Wild Life (Protection) Act, 1972; The Water (Prevention and Control of Pollution) Act, 1974; The Forest (Conservation) Act, 1980; The Air (Prevention and Control of Pollution) Act, 1981; The Environment (Protection) Act, 1986; The Biological Diversity Act, 2002; The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006; Noise Pollution (Regulation and Control) Rules, 2000; Industry-specific environmental standards; Waste management rules; Ramsar sites; Biosphere reserves; Protected Areas; Ecologically Sensitive Areas; Coastal Regulation Zone; Production and consumption of Ozone Depleting substances, Green Tribunal; Some landmark Supreme Court judgements

Major International organisations and initiatives: United Nations Environment Programme (UNEP), International Union for Conservation of Nature (IUCN), World Commission on Environment and Development (WCED), United Nations Educational, Scientific and Cultural Organization (UNESCO), Intergovernmental Panel on Climate Change (IPCC), and Man and the Biosphere (MAB) programme.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Chahal, M. K. (2024). Environmental Science and Hazards Management (Ecology and Risk Management), ISBN:978-93-6440-586-7.*
- *Baskar, S. and Baskar, R. (2009). Natural Disasters (Earth's Processes & Geological Hazards), ISBN: 978-81-7806-168-9.*
- *Tiefenbacher, J (ed.) (2022), Environmental Management - Pollution, Habitat, Ecology, and Sustainability, Intech Open, London. 10.5772/*
- *Kanchi Kohli and Manju Menon (2021) Development of Environment Laws in Cambridge University Press.*
- *Bhagwat, Shonil (Editor) (2018) Conservation and Development in India: Reimagining Wilderness, Earthscan Conservation and Development, Routledge.*
- *Manahan, S.E. (2022). Environmental Chemistry (11th ed.). CRC Press. https://doi.org/10.1201/9781003096238.*
- *William P.Cunningham and Mary A. (2015) Cunningham Environmental Science: A Global Concern, Publisher (Mc-Graw Hill, USA) Central*

Pollution Control Board Web page for various pollution standards.

- *Theodore, M. K. and Theodore, Louis (2021) Introduction to Environmental Management, 2nd Edition. CRC Press.*
- *Ministry of Environment, Forest and Climate Change (2019) A Handbook on International Environment Conventions https://moef.gov.in/wp-content/uploads/2020/02/CURVE-web.pdf & Programmes. convention-V-16-*

Course Name: Punjabi-I (Elective-I)	L	T	P	Cr.
Course Code: BPE1106	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Display skills of sentence formation in Punjabi language in efficient manner.
2. Develop skills of writing official letter in Punjabi.
3. Gaining knowledge about Punjabi literature
4. Develop creative and literary aspects in the mind of reader

ਭਾਗ - I

ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਵਿਤਾ ਸਿਧਾਂਤ ਤੇ ਵਿਹਾਰ (ਕਾਵਿ-ਸੰਗ੍ਰਹਿ) ਡਾ.ਜਸਵਿੰਦਰ ਕੌਰ,

1. ਭਾਈ ਵੀਰ ਸਿੰਘ
2. ਪ੍ਰੋ: ਪੂਰਨ ਸਿੰਘ
3. ਲਾਲਾ ਕਿਰਪਾ ਸਾਗਰ
4. ਬਾਬੂਫੀਰੋਜਨਦੀਨ ਸਰਫ
5. ਗਿਆਨੀ ਗੁਰਮੁਖ ਸਿੰਘ
6. ਲਾਲਾ ਧਨੀਰਾਮ ਚਾਤ੍ਰਿਕ
7. ਅੰਮ੍ਰਿਤਾ ਪ੍ਰੀਤਮ
8. ਮੋਹਨ ਸਿੰਘ

ਭਾਗ - II

ਕਾਲੇ ਲਿਖਨਾ ਲੇਖ (ਲੇਖ ਸੰਗ੍ਰਹਿ) ਦਲੀਪ ਕੌਰ ਟਿਵਾਣਾ

1. ਵਤਨ ਦਾ ਪਿਆਰ
2. ਪੈਰ ਦੀ ਜੁੱਤੀ ਮੁਲਾਕਾਤੀ
3. ਵਿਹਲੀਆਂ ਗੱਲਾਂ
4. ਜੀਵਨ ਤੇ ਕਲਾਂ
5. ਮੇਰਾ ਨਿਸਫਲ ਪਿਆਰ
6. ਕਹਾਣੀਆਂ ਦੇ ਪਾਤਰ
7. ਫੂਕ ਵਿੱਦਿਆ ।

ਭਾਗ - III

ਪੈਰਾਰਚਨਾਂ ਤੇ ਸੰਖੇਪ ਰਚਨਾ

ਭਾਗ - IV

ਵਿਆਕਰਨ

1.ਮੁਹਾਵਰੇ ਤੇ ਅਖੌਤਾ

2.ਬਹੁਤੇ ਸ਼ਬਦਾਂ ਦੀ ਥਾਂ ਇਕ ਸਬਦ

3. ਸਮਾਨਆਰਥਕ ਸਬਦ

ਸਹਾਇਕ ਪੁਸਤਕਾਂ:

- *ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਵਿਤਾਵਾਂ ਸੰਗ੍ਰਹਿ, ਡਾਂ.ਜਸਵੀਰ ਸਿੰਘ ਆਹਲੂਵਾਲੀਆ*
- *ਤਿੰਦਰ ਸਿੰਘ ਨੂਰ ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਾਵਿ ਸਿਧਾਤ ਕਪਰਿਪੇਖ ਆਰਸ਼ੀ ਪਬਲੀਕੇਸ਼ਨ , ਦਿੱਲੀ*
- *ਸਤਿੰਦਰ ਸਿੰਘ ਭਾਈ ਵੀਰ ਸਿੰਘ ਜੀਵਨ ਤੇ ਰਚਨਾ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ ਪਟਿਆਲਾ*

Course Title: Punjab History and Culture-1 (Earliest Times to 1000 A.D) (AEC) (Elective-I)	L	T	P	Cr.
Course Code: BPE1107	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand the political developments in Punjab from the 7th century to 1000 A.D.
2. Gain insights into the social and cultural life of Punjab during this period.
3. Trace the evolution of artistic expressions in Punjab up to 1000 A.D. Identify key artistic styles, influences and forms of visual and performing arts.
4. Understand the political and administrative systems introduced by the Turko-Afghan rulers.

Course Content

UNIT-I **8 Hours**

The Punjab from 7th Century to 1000 A.D. (A Survey of Political History of Punjab).

The Punjab from 7th Century to 1000 A.D. (A Survey of Socio–cultural History of Punjab).

UNIT-II **7 Hours**

Development of Art up to 1000 A.D.

Development of Architecture up to 1000 A.D.

UNIT-III **8 Hours**

The Punjab under Turke-Afgan Sultans.

The Punjab under the great Mughals.

UNIT-IV **7 Hours**

Salient features for the Bhakti Movement and Sufism in the Punjab.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested References:

- *L.M. Joshi (Ed.) History and Culture of the Punjab, Part–1, Patiala, 1989 (3rd Edition).*
- *L.M. Joshi and Fauja Singh (Ed.)*
- *History of Punjab, Vol. 1, Patiala, 1977.*
- *Buddha Prakash Glimpses of Ancient Punjab, Patiala, 1988.*
- *B.N. Sharma Life in Northern India, Delhi, 1966.*
- *R.S. Tripathi History of Ancient India.*

Semester-II

Course Name: Educational Technology in Physical Education	L	T	P	Cr.
Course Code: BPE2150	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Interpret the importance of educational technology for teaching lessons of physical education.
2. Develop skills in teaching various aspects of physical education.
3. Discuss current directions in special teaching aids.
4. Construct lesson plans for various physical education activities.

Course Content

UNIT-I **15 Hours**

Educational Technology: Meaning, definition, Scope, characteristics, types and importance educational technology

Communication: Types of Communication, Characteristics of Communication and Communication in the Classroom, Barriers of Communication.

Teaching Aids: Importance of Teaching Aids, Criteria for selecting teaching Aids, Broad classification of Teaching Aids

UNIT-II **15 Hours**

Audio-Visual Aids: Advantage and suggestions for effective use of selected teaching Aids, Verbal, Chalk Board, Bulletin Board, Charts, Models, Slide Projector, Over Head Projector and smart board.

New Teaching Techniques and Innovations – I, Art of questioning and answering, Purpose of Questioning, Classification of Questioning and Characteristics of Questions

UNIT-III **16 Hours**

Classroom Problems: New Teaching Techniques and Innovations – II, Meaning of classroom problems, nature of classroom problems, Types and solution of classroom problems

UNIT-IV **14 Hours**

Micro Teaching: Micro Teaching, Concept and Features of Micro Teaching, Micro Teaching Versus Traditional Teaching, Steps in Micro Teaching, Principles of Micro Teaching, Micro Teaching Skills, its Need and Importance.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Bhardwaj. A. (2003). New Media of Educational Planning. Sarup of Sons. New Delhi.*
- *Daljinder. A. (2005). Methods in Physical Education. Friends Publication, Delhi.*
- *Bhatia. B. (1959). The Principles and Methods of Teaching. New Delhi.*
- *Aggarwal. D.D. (2004). Educational Technology. Sarup of Sons, New Delhi.*
- *Dutta, A. K. (2004). Students Teaching in Physical Education. Janvani Prakashan, Delhi.*

Course Name: General Science	L	T	P	Cr.
Course Code: BPE2151	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Differentiate between living and non-living things and understand their interdependence.
2. Apply Archimedes' principle to understand buoyancy and fluid mechanics.
3. Explain fundamental laws of motion, gravitation and their real-world applications.

Course Content

UNIT-I **15 Hours**

Introduction: - Life; Living and non-living things, their differences.
Inter-dependence of plants and animals.
Water: Natural water-sources, mineral water, drinking water, physical and chemical properties of water.
Purification of water: hard and soft water, causes of hardness and their removal, harms of hard water.

UNIT-II **15 Hours**

Archimedies principles.
Properties of Gases: Oxygen, Carbon-dioxide- occurrence, properties and uses.
Air: Properties of air, uses of air, atmospheric pressure, composition of air.
Motion and Mechanics: Laws of motion, work, energy, power

UNIT-III **16 Hours**

Gravitation: Universal law of gravitation, acceleration due to gravity
Heat and Thermodynamics: Temperature, heat transfer, laws of thermodynamics

UNIT-IV **14 Hours**

Light and Optics: Reflection, refraction, lenses, human eye, optical instruments
Sound and Waves: Properties of sound, wave motion, resonance

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Bucher, C. A. Foundation of Physical Education, St. Louis: The C. V. Mosby company, 1983*
- *Wilgoose, C. E. The curriculum in Physical Education, Engle Wood Cliff N. J. The Prentice Hall Inc*
- *Irwin Lasial, W: Curriculum in Health and Physical Education, Stlouis: The C.V. Mosby Company, 1984.*
- *Synder and Geoh: Professional preparation in Health Education, Physical Education and Recreation*

Course Name: Methods of Physical Education	L	T	P	Cr.
Course Code: BPE2152	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Describe the basic skills of teaching practice.
2. Recognize the methods, forms and means required for the proper implementation
3. Demonstrate skills in class management and class formation.
4. Conduct classes for teaching games using different methods.

Course Content

UNIT-I **15 Hours**

Introduction to Methods of Physical Education, Meaning, scope and importance of methods of physical education.

Factors for determining Methods of teaching: Types of Command (beginners-Children, advanced group, large groups, complicated exercises, commands, order and directions)

UNIT-II **15 Hours**

Presentation Techniques: Class management and formation: meaning of types of class formation and class management. Principles of class management.

Lesson Planning: Types of lessons and their values, Objectives of different lessons, plans and parts of the lessons, introductory and developments, Skill Practice/group work, Class activity/Recreation Part (Reassembly, Revision and dismissal

UNIT-III **16 Hours**

Teaching of Games: Whole part, whole method of teaching skills and games, Command method, Discussion method, Project method, Demonstration method, Imitation method, Reciprocal method, Small group method

UNIT-IV **14 Hours**

Competition: meaning and their types, **Fixture of different competition.** Intramural and Extramural

Track: Layout and marking of athletics track and field events.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Singh. A (2007). Essential of physical Education. Kalyani Publisher B-1/292, Rajinder Nagar Ludhiana.*
- *Bhatia, K., & Bhatia, B. D. (1954). The Principles & Methods of Teaching. Doaba House.*
- *Kochhar, S. K. (1992). Methods and techniques of teaching. Sterling Publishers Pvt. Ltd.*
- *Sampath, K. (1981). Introduction to educational technology. Sterling Publishers Pvt. Ltd.*

Course Name: Sports Sociology	L	T	P	Cr.
Course Code: BPE2153	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Develop a sociological perspective on sport by learning basic sociological theories, concepts, and research methods.
2. Display how sport influences our values, attitudes, beliefs, perceptions, behavior, culture, and society.
3. Solve the basic principles and theories of sociology to analyze the role of sports in our everyday social lives

Course Content

UNIT-I **08 Hours**

Sports Sociology: Meaning and definition, Sports socialization of individual, sports as social institution, National integration through sports

Fans and spectators: Meaning and definition, advantages and disadvantages on sports performance

Leadership: Meaning, definition and types, Leadership and sports performance

UNIT-II **08 Hours**

Socialization through sports: Sports and integration

Sports and Violence: Is sports a cause or cure to violence Sports, Gender and Race

UNIT-III **08 Hours**

Sports and Economy: Commercialization of sports

Sports and the Media: Influence on each other Sports, social mobility-sports, and general Career Success

UNIT-IV **06 Hours**

Sports and educational opportunities Sports in Future-Will things change or remain the same

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *C.A. Bucher, Foundations of Physical Education and Sports*

- *DharamVir (Editor), Sports and Society – Readings in Sociology of Sports*
- *Jay, J. Coakley, Sports in Society – Issue and Controversies*

Course Name: Athletics (Track Events) (SEC)	L	T	P	Cr.
Course Code: BPE2154	0	0	6	3

Total Hours: 90

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Demonstrate the starting and finishing techniques of running events sprint
2. Implement the skills of ground marking and officiating in real game situation.
3. Paraphrase the rules & regulations of running events.
4. Conduct the annual athletic meet/intramural's

Course Content

90 Hours

Running Events – Sprints

100 Meter, 200Meter, 400 Meter Starts techniques and finishing techniques

Hurdle Race

100m Hurdle,110m Hurdle**,** 400m Hurdle clearance techniques and running between hurdles

Relay Races

4X100m, 4X400m Baton exchange techniques

Course Name: Business and Marketing (MDSC)	L	T	P	Cr.
Course Code: BPE2155	3	0	0	3

Total Hours: 45

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand Key Concepts of Business and Marketing in Sports
2. Analyze Market Segmentation and Consumer behaviour in Sports
3. Apply the Marketing Mix to Sports Products and Services
4. Develop and Evaluate Sports Marketing Plans

Course Content

UNIT-I **11 Hours**

Definition of Business: Understanding business in the context of sports and physical education, Types of business structures (sole proprietorship, partnership, corporation) in the sports industry.

UNIT-II **11 Hours**

Targeting and Positioning in Sports: Creating targeted marketing campaigns for different segments (youth sports, professional leagues, fitness enthusiasts). Positioning of sports brands and organizations in a competitive marketplace.

UNIT-III **11 Hours**

Product Development in Sports: Developing and marketing sports products (e.g., equipment, apparel, fitness services). The role of sports sponsorships in enhancing product offerings.

Promotion and Advertising in Sports: Role of advertising, social media and sponsorship in promoting sports events and brands.

Event promotion strategies: ticket sales, media coverage and community outreach.

UNIT-IV **12 Hours**

Sports Business Models: Overview of different business models in sports: media rights, merchandising and event management.

Revenue generation in sports: ticket sales, sponsorship, broadcasting rights.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Shank, Matthew D. Sports Marketing: A Strategic Perspective. 5th edition. Pearson, 2014.*
- *Kotler, Philip & Armstrong, Gary Principles of Marketing. 17th edition. Pearson, 2018.*
- *Master alexis, L. P., Barr, C. A., & Hums, M. A. Principles and Practice of Sport Management. 6th edition. Jones & Bartlett Learning, 2015.*
- *Greenwell, T. C., Fink, J. S., & Pastore, D. L. Contemporary Sport Management. 5th edition. Human Kinetics, 2018.*
- *Mullin, B. J., Hardy, S., & Sutton, W. A. Sport Marketing. 4th edition. Human Kinetics, 2014.*
- *Pitts, B. G., & Stotlar, D. K. Fundamentals of Sport Marketing. 4th edition. Fitness Information Technology, 2013.*
- *Chadwick, S. Sport Marketing: A Strategic Perspective. Routledge, 2017.*
- *Duffy, D., & Shank, M. D. Sports Marketing: A Practical Approach. Prentice Hall, 2005.*
- *Sandler, M. & Shani, D. Sports Marketing: Managing the Exchange Process. Prentice Hall, 2003.*

Course Name: Human Values and Professional Ethics (VAC)	L	T	P	Cr.
Course Code: VAC0002	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand the essence of Indian ethos, cultural values and ethical principles derived from scriptures, integrating self-exploration with scientific inquiry.
2. Analyze human values, self-awareness and ethical decision-making by distinguishing between perspectives, ideologies and universal moral principles.
3. Evaluate constitutional values, global responsibilities and the role of ethics in citizenship while promoting inclusivity and social welfare.
4. Develop essential life skills, stress management techniques and holistic well-being through mindfulness, self-discipline and personality development.

Course Content

UNIT–I **7 Hours**

Introduction to Indian Ethos

Meaning of ethos and cultural essence of India, Scriptures as the base of the Indian Knowledge System (IKS),

Integrating the two methodologies: interiorization process for self-exploration and exterior scientific pursuit for the prosperity of world, The Law of Karma and Nishkama Karma (The Law of action and selfless action),

Practical: Five hours of Yoga practice per week, Ethics through Music and Indian Poetry, Community Engagement

UNIT-II **8 Hours**

Human Values and Ethics:

Knowing the Self and the universal values that we stand for. This is self-enquiry & self-discovery, Background conversations and deep listening, recognizing the assumptions that we make, the biases we have and the implications for ethical action.

Self-identity: distinguishing and embracing oneself (and others) four profiles (inner potential, social, professional, personality), Distinguish ideology, perspectives beliefs from embodying values.

Practical: Self-discovery, self-enquiry and Mindfulness, Yama & Niyama of Ashthang Yoga

UNIT-III **7 Hours**

Constitutional Values, Global Responsibility & Skills for Youth:

Values embedded in the Preamble of the Indian Constitution, Integration of Human Rights and duties.

Principles and responsibilities: as citizens of India, towards global environment, Loksangraha and Vasudhaiva Kutumbakam, Conscious Full Spectrum Response model. Distinguishing judgement from discernment,

Practical: Development of concentration among students through music, fine arts, mathematics, sports, yoga and mindfulness

UNIT-IV **8 hours**

Integrated Personality and Well-being:

The three gunas (qualities of sattva-purity and harmony, rajas-activity and passion, tamas -darkness and chaos), the four antah-karanas (inner instruments) and panch kosha (five sheaths), Stress management, Oneness, non-duality and equanimity, Physical, mental, social and spiritual well-being.

Practical: Talks on importance of the Ayurvedic concept of well-being and nutrition, sports activities.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Reference Books:

- *Mahadevan, B., Bhat, V.R. and Nagendra, P.R.N. 2022. Introduction to Indian Knowledge System. Delhi: PHI.*
- *Human Values and Professional Ethics by RR Gaur, R Sangal, GP Bagaria, Excel Books, New Delhi, 2010.*
- *Kashyap, Subhash C. 2019. Constitution of India. A handbook for students. New Delhi: Book Trust.*
- *Dr. Awadesh Pradhan, Mahamana ke Vichara". (B.H.U., Vanarasi 2007) Harold Koontz & Heinz Weihrich, Essentials of Management, Tata McGraw Hill.*
- *Lama, D. 2012. Beyond Religion: Ethics for a Whole World. India: Harper Collins. Shrimad Bhagavad-Gita (Part of the Mahabharata). 1994. Gorakhpur: Gita Press.*

- *Swami Harshananda. 2000. The Birds' Eye View of the Vedas. Bangalore: Ramakrishna Math.*
- *Fontaine, D. K., Rushton, C. H. and Sharma, M. 2013. Cultivating Compassion and Empathy. In: M. Plews-Ogan and G. Beyt (Eds.), Wisdom Leadership in academic Health Science Centers- Leading Positive Change. London: Radcliffe Publishing.*
- *Blanchard, Kenneth and Peale, Norman Vincent. 1988. The Power of Ethical Management. New York: William Morrow and Company, Inc.*
- *Gandhi, Karamchand. 1971. Pathway to God compiled by MS Deshpande. Ahmedabad: Navajivan Mudranalaya, Navjivan Trust.*
- *Gardner, H. 2006. Five Minds for the Future. Boston: Harvard Business School Press.*
- *Rodriguez, S. and Juvva, S. 2018. Embodying Universal Values and Ethical Leadership in Higher Education: Creating Change Agents for Social Transformation. In B. Chatterjee, A. Banerji and P. Arya (Eds.). Resolution to Resolve: Sustainability Practices in Industry and Education. New Delhi: Bloomsbury [ISBN: 978-938-74-7168-91*
- *Sharma, M. 2017. Radical Transformational Leadership: Strategic Action for Change Agents. Berkeley, US: North Atlantic Books.*
- *Web Sources:*
- *https://www.holy-bhagavad-gita.org/*
- *https://iksindia.org/*
- *NPTEL Course: Exploring Human Values: Visions of Happiness and Perfect Society https://ebooks.inflibnet.ac.in/hrmp01/*

Course Name: Punjabi -II (AEC-II) (Elective-II)	L	T	P	Cr.
Course Code: BPE2156	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Display skills of sentence formation in Punjabi language in efficient manner.
2. Develop skills of writing official letter in Punjabi.
3. Gaining knowledge about Punjabi literature
4. Develop creative and literary aspects in the mind of reader

Course Name: Punjab History and Culture-II (1000-1849A.D.) (Elective-II)	L	T	P	Cr.
Course Code: BPE2157	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Students will critically evaluate Punjab's political, social and cultural shifts from the early medieval period to Sikh ascendancy.
2. Students will gain insights into Sikhism's foundations, the Gurus' role and its transformative effect on Punjab's culture and religion.
3. Students will assess the formation, expansion and decline of the Sikh Empire under Ranjit Singh and its subsequent impact on British colonial ambitions.
4. Students will examine the causes, events and outcomes of the Anglo-Sikh Wars, including the British annexation of Punjab

Course Content

UNIT-I **8 Hours**

The Punjab under Turku-Afghan Sultans, The Punjab under the Great Mughals. Silent features of the Bhakti Movement and Sufism in the Punjab.

UNIT-II **8 Hours**

Guru Nanak Dev’s teachings and impact on society - Development of Sikhism (1539-1606) with special Text Books to Sangat, Masand, system, Compilation of Adi Granth and Martyrdom of Guru Arjan Dev.

Martyrdom of Guru Teg Bahadur: Foundation of Khalsa by Guru Gobind Singh.

UNIT-III **8 Hours**

Banda Bahadur and his achievements - Sikh Struggle for sovereignty in the Punjab, 1716 to 1799, Ranjit Singh’s Rise to power; Civil and Military administration of Ranjit Singh.

UNIT-IV **6 Hours**

The Anglo-Sikh Wars and Annexation of the Punjab - Social life with special reference to position of women, fairs, festival, folk music, Dance and games in the Punjab.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Singh. K. (1990). History and Culture of the Punjab, Part-II. Patiala,*
- *Singh. F. (1972). History of the Punjab. Vol. I. Patiala*
- *Chhabra. G. S. (1970). The Advanced History of the Punjab. Vol. I. New Delhi*
- *Grewal. J. S. (1990). The new Cambridge History of India. The Sikhs of Punjab. Hyderabad*
- *Singh. K. (1469-1839). A History of the Sikhs. New Delhi*

Semester-III

Course Name: Test, Measurement and Evaluation in Physical Education	L	T	P	Cr.
Course Code: BPE3200	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Recognize the need and importance of tests, measurement, and evaluation in physical education.
2. Acquire knowledge about the administration of different motor fitness and physical fitness tests.
3. Memorize anthropometric measurements.
4. Develop skills in interpreting the results of the above tests.

Course Content

UNIT-I **16 Hours**

Introduction: Meaning & definition of test, measurement and evaluation, Importance of test, measurement and evaluation in physical education, Organization and administration of tests results, Presentation and interpretation of tests results

Construction & Characteristics of an effective test: validity, reliability, objectivity, subjectivity, economy, standard norms

UNIT-II **14 Hours**

Physical (General) Fitness Test: Sergeant Test, Kraus Webber test, Rogers strength test,

Motor fitness test: J.C. R. test, AAPHER's youth fitness test

Cardio-vascular test: Harvard step test, 12-minute run/walk test

UNIT-III **15 Hours**

Test for motor fitness: Indiana motor fitness test (for elementary and high schoolboys, girls and college men), Oregon motor fitness Test

Motor ability test: Newton test, Barrow test, Cozen test

Motor Educability test: Methane Johnson test, Iowa brace test

UNIT-IV **15 Hours**

Sports skill test:

Basketball: Johnson basketball test, Harrison Basketball battery Mc-Donald volley soccer test.

Badminton: Lockhart and McPherson Badminton test,

Hockey: Schmithals-French Achievement test,

Soccer: Warner test of soccer skills, Volleyball: Helmen Volley ball test,
Tennis: Dyer tennis test.

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Vijayalaksmi, M. (2006). Evaluation in Physical Education. Friends Publication, 6, Mukerjee Tower, Dr. Mukerjee Nagar*
- *Madhuri T. W. (2006). Measurement and Evaluation in Physical Education. Friends Publication, 6, Mukerjee Tower, Dr. Mukerjee Nagar*
- *Mishra, S.C. (2005). Test and Measurement in Physical Education. Sports Publication, G-6,23/23BEMCA House, Ansari Road, Darya Ganj*
- *McCloy, C.H. (2004). Test and Measurement in Physical Education. Friends Publication, 6, Mukerjee Tower, Dr. Mukerjee Nagar*

Course Name: Athletic Care and Rehabilitation	L	T	P	Cr.
Course Code: BPE3201	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Interpret and apply prevention strategies for athletic injuries effectively.
2. Interpret and implement appropriate treatment protocols for various types of athletic injuries.
3. Demonstrate proficiency in massage techniques for injury management and recovery.
4. Interpret and develop rehabilitation programs for athletes recovering from injuries, facilitating their return to optimal performance.

Course Content

UNIT-I **15 Hours**

Corrective Physical Education: Definition and Objectives of Corrective Physical Education, Posture and Body Mechanics, Standards of Standing Posture, Value of Good Posture, Drawbacks and Causes of Bad Posture

Posture Test: Examination of the Spine

UNIT-II **14 Hours**

Posture and Rehabilitation Exercises: Normal Curve of the Spine and its Utility Deviations in Posture-Kyphosis, Lord Oasis, Flat Back, Scoliosis, Round Shoulders, Knock Knee, Bow Leg, Flat Foot

Causes for Deviations and Treatment Including Exercises: Passive, Active, Assisted, Resisted Exercise for Rehabilitation

UNIT-III **16 Hours**

Massage: Brief History of Massage, Massage as an Aid for Relaxation, Points to be considered in giving Massage, Physiological, Chemical, Psychological Effects of Massage, Indication /Contra Indication of Massage, Classification of the Manipulation used Massage and their Specific Uses in the Human Body, Stroking Manipulation, Effleurage, Pressure Manipulation, Percussion Manipulation, Cupping, Poking, Shaking Manipulation, Deep Massage

UNIT-IV **15 Hours**

Sports Injuries Care, Treatment and Support: Principles Pertaining to the Prevention of Sports Injuries, Care and Treatment of Exposed and Unexposed Injuries in Sports, Principles of apply Cold and Heat, Infrared Rays, Ultrasonic Therapy, Short-wave Diathermy Therapy, Principles and Techniques of Strapping and Bandages

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Dohenty. J. Meno. Wetb, Moder D (2000) Track & Field, Englewood Cliffs, Prentice Hal Inc*
- *Lace, M. V. (1951) Massage and Medical Gymnastics, London: J & A Churchill Ltd*
- *Mc Ooyand Young (1954) Tests and Measurement, New York: Appleton Century*
- *Naro, C. L. (1967) Manual of Massage and, Movement, London: Febra and Febra Ltd.*
- *Rathbome, J.l. (1965) Corrective Physical education, London: W.B. Saunders & Co. Stafford and Kelly, (1968) Preventive and Corrective Physical Education,*

Course Name: Sports Psychology	L	T	P	Cr.
Course Code: BPE3202	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Counsel athletes effectively in dealing with success and failure, providing guidance on managing both outcomes.
2. Orient athletes towards future opportunities, helping them set and achieve their goals.
3. Develop skills in managing stress and anxiety among athletes, enhancing their mental well-being and performance.
4. Provide counselling on injuries and rehabilitation, supporting athletes in their physical recovery and return to sport

Course Content

UNIT-I **14 Hours**

Sports Psychology in Physical Education and Sports: Meaning, definition and scope of sports psychology in physical education and sports, Aim and Objectives of sports psychology in sports, Principles of sports psychology, Need and importance of sports psychology.

UNIT-II **16 Hours**

Stress & Anxiety in Sports: Meaning and definition of stress and anxiety, Types of stress and anxiety, Causes, Symptoms and effects of stress and anxiety, competition anxiety, Management of stress and anxiety.

UNIT-III **15 Hours**

Motivation and Sports Performance, Meaning and definition of Motivation, Types and techniques of motivation, Principles and Importance of motivation, Role of coach/teacher /government in motivation

UNIT-IV **15 Hours**

Counselling to Athletes, counselling on injuries and rehabilitation, counselling on handling success and failure in sports, Counselling on drugs in sports, Counselling job opportunities and life after retirement from sports

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Rechard Nelson-Jones, Basic Counselling Skills, Sage Publication, New Delhi.*
- *Dr. ML Kamlesh, Psychology in Physical Education and Sports, Educational Publishers and Distributors.*
- *An Introduction to Counselling-Mc Graw-Hill Education*

Course Name: Sports Nutrition and Weight Management	L	T	P	Cr.
Course Code: BPE3203	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Develop the skills to calculate an individual's daily caloric requirements and design a suitable diet plan.
2. Gain a comprehensive understanding of the principles of sports nutrition.
3. Recognize the significant impact of food on physical performance.
4. Be capable of understanding and creating weight management plans for individuals.

Course Content

UNIT-I **08 Hours**

Introduction to Sports Nutrition: Meaning and Definition of Sports Nutrition, Basic components of Nutrition, Factor to consider for developing nutrition plan

UNIT-II **08 Hours**

Nutrients:

Ingestion to energy metabolism: Carbohydrates, Protein, Fat – Meaning, classification and its function, Role of carbohydrates, Fat and protein during exercise

Vitamins, Minerals, Water: Meaning, classification and its function, Role of hydration during exercise, Establishing daily caloric requirement and expenditure

UNIT-III **07 Hours**

Weight Management

Obesity: Definition, meaning, types and causes of obesity, Health risks associated with Obesity and Solutions for Common Myths about Weight Loss, Concept of weight management in modern era, Factor affecting weight management.

UNIT-IV **07 Hours**

Steps of planning of Weight Management: Determination of desirable body weight Daily calorie intake and expenditure in weight management, Role of diet and exercise in weight management

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Bessesen, D. H. (2008) Update on obesity. JClin Endocrinol Metab*
- *2027-2034 Butryn, M.L., Phelan, S., & Hill, J. O. (2007). Consistent self-monitoring of weight: a key component of successful weight loss maintenance. Obesity (Silver Spring). 15(12), 3091- 3096*
- *Chu, S.Y. & Kim, L. J. (2007) Maternal obesity and risk of stillbirth: a meta analysis. Am J Obstet Gynecol, 197(3), 223-228*
- *DeMaria, E. J. (2007). Bariatric surgery for morbid obesity N Engl J Med,356(21), 2176- 2183*
- *Dixon, J.B., O'Brien, P.E., Playfair, J. (n.d.). Adjustable gastric banding and conventional therapy for type 2 diabetes: arandomized controlled trial JAMA 299(3), 316-323*
- *Bates M. (2008) Health Fitness Management (2nd Ed.) USA: Human Kinetics 101*
- *Fink, H.H., Burgoon, L. A., & Mikesky, A.E. (2006). Practical Applications in Sports Nutrition Canada: Jones and Bartlett Publishers*
- *Lancaster S. & Teodoressu, R. (2008). Athletic Fitness for Kids USA: Human Kinetics Martin Estwood (2005) – Principle of human nutrition, Atlantic publication, New Delhi*
- *Michael J. Gibney (2002)–Human Nutrition, Atlantic publication, New Delhi*

Course Name: Athletics (Field Events) (SEC)	L	T	P	Cr.
Course Code: BPE3204	0	0	6	3

Total Hours: 90

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Demonstrate the starting and finishing techniques of high and long jump events.
2. Demonstrate the starting and finishing techniques of the triple jump event.
3. Interpret the rules and regulations of running events.
4. Conduct the jump events at various levels.

Course Content

Field Events:

Long Jump: All techniques with Approach run, take off, flight and landing. Rules, Measurements and sports wears.

Triple Jump: All techniques with Approach run, take off, Hop-step-jump, flight and landing. Rules, Measurements and sports wears.

High Jump: All techniques with Approach run, take off, position over the bar and landing. Rules, Measurements and sports wears.

Throwing Events:

Shot-put, Discus throw, Javelin throw and Hammer Throw: All techniques with rules, Measurements and sports wears.

Course Name: Leadership Skills (MDSC)	L	T	P	Cr.
Course Code: BPE3205	3	0	0	3

Total Hours: 45

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Develop essential leadership skills necessary to address complex sports issues
2. Acquire the skills needed to lead effectively in the field of sports, particularly in addressing complex challenges.
3. Understand the framework, roles, and functions of leaders with in sports organizations.
4. Identify and fulfill the responsibilities of a sports leader, contributing to the success and growth of sports initiatives.

Course Contents

UNIT-I **11 Hours**

Leadership: Introduction of leadership, Types of leadership, Theories of leadership, Qualities of an effective leader, Difference between leader & manager, how to develop leadership

UNIT-II **11 Hours**

Leadership Positions in Sports and Physical Education Role and Contribution of Leader in Development and Promotion of Sports

Meetings: Notice of Meeting, The Agenda, Conducting a Meeting, Tips for a good Meeting, Minutes of Meeting, Report Writing

UNIT-III **12 Hours**

Communication: Introduction of Communication, Types of communication, Methods of communication, Network of communication, Barriers to effecting communication, press release, press conference, media coverage, Annual reports of individual and organization a performance

UNIT-IV **11 Hours**

Decision Making: Introduction of decision making in sports, Types of managerial decisions, Models of decision- making, Fair Play in Sports

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Fair Play in Sport Sigmund Loland: 2006*
- *Effective Leadership in Adventure Programming, Simon Priest, Michael A. Gass: 2005*
- *Outdoor Leadership Theory and Practice Bruce Martin, Christine Cashel, Mark Wagstaff, May Breuning: 2006*
- *Performance Leadership Frank Buytendijk: 2009*
- *Brilliant Leader Simon Cooper: 2010 Sport Administration Manual International Olympic Committee*

Course Name: General English (AEC)	L	T	P	Cr.
Course Code: BPE3206	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Demonstrate improved verbal and written communication skills, with a focus on clarity and effectiveness in both every day and sports-specific contexts.
2. Develop a strong sports and fitness-related vocabulary, with the ability to apply idioms, phrasal verbs and technical terms in appropriate contexts.
3. Demonstrate proficiency in reading comprehension and critical thinking, particularly in analyzing articles and texts related to sports and physical
4. Write coherent paragraphs, formal letters, reports and resumes, with a focus on professionalism and the conventions of sports-related writing.

Course Content

UNIT-I **7 Hours**

Introduction to Communication: The process of communication: sender, message, receiver, feedback.

Types of communication: verbal, non-verbal, written, and visual.

Effective Communication: Principles of effective communication, clarity, conciseness, coherence, and courtesy.

Barriers to effective communication: physical, emotional, linguistic and cultural.

UNIT-II **8 Hours**

Word Formation: Prefixes, suffixes and root words. Synonyms, antonyms, and homophones.

Contextual Vocabulary: Understanding words in context, idiomatic expressions, phrasal verbs, and collocations.

Vocabulary for physical education and sports: terms used in fitness, training, and sports management.

UNIT-III **8 Hours**

Reading Skills: Techniques for improving reading comprehension, skimming, scanning and detailed reading. Identifying the main idea, supporting details, and inference in texts.

Critical Thinking: Analyzing arguments and viewpoints in written texts. Evaluating evidence, conclusions, and drawing your own conclusions based on reading.

UNIT-IV **7 Hours**

Types of Writing:

Paragraph writing: structure and organization. Writing formal letters, emails, and notices (related to sports events, physical education announcements).

Report Writing:

Writing sports reports: Event reports, match reports, and training session summaries. Understanding the structure and purpose of a report.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *R. C. Sharma & Krishna Mohan Business Correspondence and Report Writing. 2nd edition. Tata McGraw-Hill Education, 2011.*
- *M. Ashraf Rizvi Effective Technical Communication: A Guide for Scientists and Engineers. Tata McGraw-Hill, 2009.*
- *Norman Lewis Word Power Made Easy. Goyal Publishers, 2004.*
- *C. B. Gupta Business Communication. 2nd edition. Sultan Chand & Sons, 2017.*
- *William Zinsser On Writing Well: The Classic Guide to Writing Nonfiction. Harper Perennial, 2006.*
- *John Seely Oxford Guide to Writing and Speaking. Oxford University Press, 2008.*
- *L.G. Alexande Practical English Usage. Oxford University Press, 2017.*
- *David Cotton & David Falvey English for Business Communication. Cambridge University Press, 2013.*
- *Graddol, D., Leith, D., & Swann, J. English in the World: Teaching and Learning the Language and Literatures. Routledge, 2006.*
- *B. Kumar & Hemant S. Communication Skills. Laxmi Publications, 2011.*

Semester-IV

Course Name: Exercise Physiology	L	T	P	Cr.
Course Code: BPE4250	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Approximate the basic principles of physiology and Exercise Physiology
2. Apply the knowledge in the field of physical education and movement activity.
3. Analyse the practical knowledge during the practical situation.
4. Illustrate of physiology and co-relate the principles of physiology. Appraise the effects during the training and practical sessions.

Course Content

UNIT-I **14 Hours**

Functional Adaptations to Exercise: Hormonal control during exercise, Exercise and neuromuscular system, metabolic adaptations to exercise, Cardio-respiratory changes,
Effects of exercise and training on health and fitness

UNIT-II **16 Hours**

Energy Continuum and Recovery Process: Metabolism and exercise Recovery from exercise,
Replenishment of energy stores during recovery process
Removal of excess lactic acid produced during exercise
Restoration of myoglobin oxygen stores

UNIT-III **15 Hours**

Exercise in hot and cold environment: Body temperature regulations, Physiological responses to exercise in the heat, acclimatization to exercise in heat
Physiological responses to exercise in cold, Health risks during exercise in the cold

UNIT-IV **15 Hours**

Altitude and physiology: Exercise performance at altitude, Physiological responses to acute altitude exposure, chronic altitude exposure and acclimatization
Aging process and Ergogenic: Age related changes and exercise, Ergogenic aids and physical activity

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *W. Larry Kenney, Jack H. Wilmore, DavidL. Costill, 2012, Physiology of Sports and Exercises*
- *Robert A. Robergs, Scott O. Roberts, 2000, Fundamental Principles of Exercise Physiology for Fitness, Performance, and Health*
- *Larry G. Shaver, 1982, Essentials of Exercise Physiology*
- *Dr. Sandhya Tiwari, 2006, Exercise Physiology*
- *M. Dena Gardiner, 1985, The Principles of Exercise Therapy*
- *EdwardL. Fox, Richard W. Bowers, MerleL. Foss, 1981, The Physiological Basis of Physical Education and Athletics*
- *Michael S. Bahrke, Charles E. Yesalis, 2002, Performance – Enhancing Substances in Sport and Exercises.*

Course Name: Officiating and Coaching	L	T	P	Cr.
Course Code: BPE4251	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Demonstrate a thorough understanding of the rules and regulations of the selected sport.
2. Skilfully layout and mark the dimensions of a playing court for the chosen sport.
3. Organize sports events and effectively officiate during these events.
4. Acquire the skills required for coaching sports teams. Additionally, students will be capable of organizing and officiating in yogic events.

Course Content

UNIT-I **16 Hours**

Introduction of Officiating and coaching: Concept of officiating and coaching, Principles of officiating & Coaching, Importance of officiating and coaching, Qualifications for Officials conducting various tournaments

UNIT-II **14 Hours**

Rules and Layout: Dimensions, layouts and marking of fields of Basketball and Badminton, Rules and their interpretations, Qualification and number of officials, Coaching in the chosen Basketball and Badminton and Duties of Official

UNIT-III **15 Hours**

Dimensions, layouts and marking of fields of Volleyball and Football, Rules and their interpretations of Volleyball and Football, Qualification and number of officials, Coaching in Volleyball and Football and Duties of Official

UNIT-IV **15 Hours**

Qualities, Qualifications of Coach and Official:

Layout, dimensions and markings of Track and Field, Rules and their interpretations of running events in Track and Field, coaching in Athletics.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings

- *Bunn, J. W. (1968). Theart of officiating sports. Englewood cliffs N. J. Prentice*
- *Hall Bunn, J. W. (1972) Scientific principles of coaching*
- *Englewood cliffs N. J. Prentice Hall Dyson, G. H. (1963) The mechanics of athletics London: University of London Press Ltd*
- *Dyson, G. H. (1963). The mechanics of Athletics London: University of London Press Ltd. Lawther, J.D. (1965) Psychology of coaching New York: Pre Hall*
- *Singer, R. N. (1972). Coaching, athletic & psychology New York:*
- *M. C. Grew Hill Official Rule Book / Handbook of the concerned federation of sports*

Course Name: Sports Management	L	T	P	Cr.
Course Code: BPE4252	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Paraphrase the concept of sports management.
2. Manage physical education and sports events.
3. Develop skills in financial management and budgeting for sports events.
4. Gain knowledge of various sports events development and knowledge of various sports events.

Course Content

UNIT-I **15 Hours**

Management in Physical Education and Sports: Meaning, Concept, Need and Scope of Sports Management

Functions of Management: Planning, Organizing, Staffing, Directing, Controlling and Evaluating

Management Skills: Personal Interpersonal Skills, Conceptual and Technical Skills

UNIT-II **15 Hours**

Managerial Roles: Interpersonal Roles, Informational Roles, Decision Making Roles

Qualities and Qualification of a Manager: Personal Qualities, Leadership Qualities, Academic and Professional Qualities

Personal Management: Introduction, Meaning, Principle, Aspects of Personal Management

UNIT-III **14 Hours**

Job Analysis: Descriptions and Specifications

The Budget: Meaning, Definition and Objectives of the Budget, Principles of Planning a Sports Budget

Management of Facilities: Introduction, Administration and General Principles of Planning Facilities, Types of Facilities, Facility Requirements, Management of Sports Infrastructure- Indoor Facilities, Gymnasium and Swimming Pool.

UNIT-IV **16 Hours**

Management of Equipment's and Materials: Introduction, Meaning, Need and Importance, Types, Principles of Purchase, Equipment Care, Maintenance and Disposal, Intramural and Extramural Competitions, Public Relations

Offices and Officials Communication: Meaning, Types of Communications and Barriers in Effective Communication.

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *M. L. Kamlesh. Management Concepts in Physical Education and Sport (2nd revised and updated); New Delhi; Khel Sahitya Kendra, (2016)*
- *P. Cherlladurai. Sport Management–Macro Perspectives; London, Ontario (Canada); Sports Dynamics (1985)*
- *Allen, L. A. Management & Organization. Kogakusha Co. Tokyo,1988.*
- *Hert, Renis, New Patterns of Management, Mc Graw Hill,1961.*
- *Sandhu, K. Sports Dynamics: Psychology, Sociology and Management Sivia, G.S. Sports Management in Universities*

Course Name: Physical Fitness Assessment and Evaluation	L	T	P	Cr.
Course Code: BPE4253	2	0	0	2

Total Hours: 30

Course Learning Outcomes: By the end of the Physical Fitness Assessment and Evaluation course, students will be able to:

1. Identify and define key components of physical fitness and their significance.
2. Perform common fitness tests and evaluate physical fitness levels.
3. Analyze and interpret results from physical fitness assessments and create appropriate fitness goals.
4. Tailor fitness assessments to different age groups, fitness levels and individuals with specific health conditions.

Course Content

UNIT-1 **08 Hours**

Definition and Components of Physical Fitness: Understanding the key components of physical fitness (cardiovascular endurance, muscular strength, flexibility, body composition, and muscular endurance).

Importance of Physical Fitness: The role of physical fitness in overall health and wellness.

UNIT-II **08 Hours**

Types of Fitness Assessments: Overview of common physical fitness tests (1.5-mile run, push-ups, sit-ups, flexibility tests).

Cardiovascular Fitness Testing: Methods for assessing cardiovascular endurance (e.g., Cooper's 12-minute run, step tests).

UNIT-III **08 Hours**

Interpreting Test Results: How to evaluate and interpret results from fitness assessments (normative data vs. individualized data).

Setting Fitness Goals: Using assessment results to set realistic, achievable fitness goals.

UNIT-IV **06 Hours**

Fitness Assessment for Different Age Groups: Assessment methods for children, adults, and the elderly.

Special Considerations in Fitness Testing: Modifications for individuals with disabilities, chronic conditions, or injuries.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Heyward, V. H. (2018). Advanced Fitness Assessment and Exercise Prescription (8th ed.). Human Kinetics.*
- *Astrand, P. O., & Rodahl, K. (2017). Textbook of Work Physiology: Physiological Bases of Exercise (5th ed.). Human Kinetics.*
- *Baechle, T. R., & Earle, R. W. (2008). Essentials of Strength Training and Conditioning (3rd ed.). Human Kinetics.*
- *American College of Sports Medicine (ACSM). (2013). ACSM's Guidelines for Exercise Testing and Prescription (9th ed.). Wolters Kluwer Health.*
- *Wilmore, J. H., & Costill, D. L. (2004). Physiology of Sport and Exercise (3rd ed.). Human Kinetics.*
- *Kraemer, W. J., & Ratamess, N. A. (2004). Fundamentals of Resistance Training: Progression and Exercise Prescription. Medicine & Science in Sports & Exercise.*
- *Clark, M. A., Lucett, S. C., & Sutton, B. D. (2014). NASM Essentials of Personal Fitness Training (5th ed.). Jones & Bartlett Learning.*

Course Name: Yoga (Theory) (VOC)	L	T	P	Cr.
Course Code: BPE4254	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Gain a theoretical understanding of Yoga, its philosophy, and history.
2. Learn how to incorporate basic Yoga practices (asanas, pranayama and meditation) into daily life.
3. Develop a mindful and ethical approach to Yoga practice.
4. Achieve improved physical and mental well-being through regular practice.

Course Content

UNIT-I **08 Hours**

Definition of Yoga Historical context: Origins and evolution of Yoga
Overview of the six major branches of Yoga: Hatha, Karma, Bhakti, Janna, Kundalini and Raja Yoga The role of Yoga in modern life

UNIT-II **08 Hours**

Introduction to the Yoga Sutras Key concepts: "Chitta Vritti" (mind fluctuations) and the path to "Chitta Vrittinirodha" (stillness of mind)
The Eight Limbs of Yoga (Ashtanga Yoga): Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi Understanding the significance of each limb in the process of self-realization

UNIT-III **08 Hours**

The science of breath (Prana and Pranayama) Introduction to basic breathing techniques: Ujjayi, Kapalbhati, Anulom Vilom Benefits of Pranayama for physical and mental well-being

UNIT-IV **06 Hours**

The physical, mental, and emotional benefits of Yoga, Yoga as a preventive measure and its role in stress relief, Yoga for chronic ailments (back pain, insomnia, hypertension, etc.)

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Desikachar, T.K.V. The Heart of Yoga: Developing a Personal Practice (1995)*
- *Iyengar, B.K.S. Light on Yoga (2000)*
- *Patanjali, Yoga Sutras (translated by Sri Swami Sivananda, 2006)*
- *Sivananda, Swami. The Complete Illustrated Book of Yoga (2000)*
- *Taimni, I.K. The Science of Yoga (1961*

Course Name: Yoga (Practical) (VOC)	L	T	P	Cr.
Course Code: BPE4255	0	0	4	2

Total Hours: 60

Course Learning Outcomes: By the end of this course, students will be able to:

1. Develop an understanding of key Yoga postures.
2. Perform basic asana correctly, focusing on breath and alignment.
3. Learn and practice basic Pranayama techniques.
4. Cultivate awareness of breath and its effects on the mind and body

Course Content

Total Hours: 60

Introduction to basic asanas:
Standing, Sitting, Prone position and Supine positions asanas.
Alignment and posture basics stretching, strengthening and relaxation benefits
Practice of basic Pranayama techniques: Ujjayi, Kapalbhati, Anulom Vilom Introduction to Pratyahara
Combining asana with Pranayama Understanding the flow of energy and breath during practice

Course Name: Indian Health Sciences (VAC)	L	T	P	Cr.
Course Code: IKS0006	2	0	0	2

Total Hours: 30

Course Learning Outcomes: By the end of this course, students will be able to:

1. Understand knowledge of India's traditional health systems
2. Critically analyse India's healthcare policies
3. Understand the patterns, causes and effects of diseases in India and strategies for prevention and control.
4. Learn about nutrition, sanitation, mental health, and lifestyle diseases like diabetes and cardiovascular disorders, along with preventive healthcare measures.

Course Content

UNIT-I **7 Hours**

Introduction, Vedic foundations of Ayurveda. Ayurveda is concerned both with maintenance of good health and treatment of diseases.

UNIT-II **8 Hours**

Basic concepts of Ayurveda. The three Gunas and Three Doshas, Pancha-mahabhuta and Sapta-dhatu.

The importance of Agni (digestion). Six Rasas and their relation to Doshas. Ayurvedic view of the cause of diseases.

UNIT-III **8 Hours**

Dinacharya or daily regimen for the maintenance of good health. Ritucharya or seasonal regimen. Important Texts of Ayurveda. Selected extracts from Astängahrdaya (selections from Sütrasthāna)

and Suśruta-Samhita (sections on plastic surgery, cataract surgery and anal fistula). The large pharmacopeia of Ayurveda.

UNIT-IV **7 Hours**

Charaka and Sushruta on the qualities of a Vaidya. The whole world is a teacher of the good Vaidya.

Charaka's description of a hospital. Hospitals in ancient and medieval India.

Transactional Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Park's Textbook of Preventive and Social Medicine K. Park*
- *Ayurveda: The Science of Self-Healing - Dr. Vasant Lad*
- *Health Sector in India: A Policy Perspective - P. K. Pandey*
- *Essential Readings in Health Policy and Law Joel B. Teitelbaum & Sara E. Wilensky*

Course Name: Media and Mass Communication (AEC)	L	T	P	Cr.
Course Code: BPE4256	2	0	0	2

Total Hours: 30

Course Learning Outcomes: By the end of this course, students will be able to:

1. Gain an understanding of the evolution of mass media and its impact on society, particularly in the field of sports.
2. Critically assess and apply key media theories and communication models in various media and communication scenarios.
3. Analyze the role and influence of media in sports journalism, event coverage, and fan engagement, particularly in the age of social media.
4. Gain practical knowledge of media production processes and tools, including digital platforms, for effective communication in sports media.

Course Content

UNIT-I **8 Hours**

Overview of Media and Mass Communication: Definition and scope of media and mass communication.

Evolution of mass media: Print, radio, television, and digital media. Types of Media Traditional Media Print media (newspapers, magazines), radio, television.

UNIT-II **8 Hours**

Classical and Contemporary Media Theories: Theories of communication, Hypodermic Needle Theory, Two-Step Flow Theory, Uses and Gratifications Theory.

UNIT-III **8 Hours**

Sports Journalism: The role of media in sports, Reporting, broadcasting and commentary.

Evolution of sports media: From print coverage to online sports journalism.

Media Coverage of Sports Events: How media shapes public perception of sports events and athletes. The impact of television and social media on sports fandom and marketing.

UNIT-IV **6 Hours**

Introduction to Media Production: Basic concepts in media production, Pre-production, production and post-production.

Types of media content: Print, audio, video and digital formats.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Baran, S. J., & Davis, D. K. Mass Communication Theory: Foundations, Ferment, and Future. Cengage Learning, 2015.*
- *Mc Quail, D. Mc Quail's Mass Communication Theory. Sage Publications, 2010.*
- *Raymond Boyle & Richard Haynes Sports Journalism: A Multimedia Primer. Sage Publications, 2009.*
- *Thompson, W The Media and Modernity: A Social Theory of the Media. Polity Press, 1995.*
- *Gitlin, T.The Sixties: Years of Hope, Days of Rage. Bantam, 1987.*
- *Jenkins, H. Convergence Culture: Where Old and New Media Collide. NYU Press, 2006.*
- *Meikle, G., & Young, S. Media Convergence: Networked Digital Media in Everyday Life. Palgrave Macmillan, 2012.*
- *Stewart, B., & Smith, A. Sports, Media and Society. Sage Publications, 2008.*
- *Croteau, D., & Hoynes, W. The Business of Media: Corporate Media and the Public Interest. Sage Publications, 2006.*
- *Broughton, J. Sports Public Relations and Communication: A Handbook. Routledge, 2014.*

Semester-V

Course Name: Kinesiology	L	T	P	Cr.
Course Code: BPE5300	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Interpret the need of kinesiology in physical education and sports.
2. Implement mechanical principles to analyse and improve human movement.
3. Analyse the degrees of movement possible at major joints of the human body.
4. Assess and analyse abnormal movement at joints or any joint deformities.

Course Content

UNIT-I **16 Hours**

Introduction: Definition of Kinesiology, need in physical education and sports, Skeleton system and human body movements, skeleton muscles and structural classification, directional terminology for muscles attachment

Types of muscular contraction: (isotonic, isometric, isokinetic), Axis and planes of movement, angle of pull, Role of Muscles (Agonists, Antagonist, stabilizer, Neutralizer)

UNIT-II **14 Hours**

Fundamental Movements of the major body segments Shoulder Girdle and Hip Joint, Movements and description of muscles of Elbow Joint and Knee Joint, Movements and description of muscles

UNIT-III **15 Hours**

Fundamental Movements of the Wrist Joint and Ankle Joint, description of muscles, Movement Structural Classification of Muscles

Application of newton's law of motion in different games.

UNIT-IV **15 Hours**

Origin, insertion and action of the following muscles: Sterno Mastoid, Trapezius, Serratus Anterior, Deltoid, Biceps, Pectoralis Major, latissimus–dorsi, Triceps, gluteus, Quardriceps, Hamstrings and gastrocnemius

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Pande, P.K., Gupta, L. C. (1987). First Aid to the Injured, St. John Ambulance Association. New Delhi*
- *Gandiner MD. (1981). The Principles of Exercise Therapy. Bell & Hyman New Delhi*
- *Kessler. H. H. (1950) The Principles and Practices of Rehabilitation. Philadelphia Lea &Febiger*

Course Name: Basics of Sports Training	L	T	P	Cr.
Course Code: BPE5301	4	0	0	4

Total Hours: 60

Course Learning Outcomes: By the end of the Basics of Sports Training course, students will be able to:

1. Understand the key principles of sports training and their application in improving athletic performance.
2. Develop physical conditioning programs focusing on aerobic, anaerobic, flexibility and mobility training.
3. Apply appropriate technical and tactical training strategies for different sports.
4. Design recovery, nutrition and injury prevention plans for athletes.
5. Recognize the importance of mental preparation and coaching techniques in sports performance.

Course Content

UNIT-I **15 Hours**

Overview of Sports Training: Meaning and definition, Importance of sports training in performance improvement and injury prevention. Principles of sports training, Types of sports training.

UNIT-II **15 Hours**

Cardiovascular Conditioning: Aerobic conditioning for endurance sports (e.g., long-distance running, swimming). Methods such as continuous training, interval training and fartlek training.

Anaerobic Conditioning: Explosive strength and power training for sports requiring short bursts of activity (sprinting, weightlifting). Training methods include resistance training, plyometric and sprint intervals.

UNIT-III **16 Hours**

Technical Training: Skill development for specific sports (e.g., ball control in soccer, stroke technique in swimming). Drills and repetition to enhance technical proficiency.

Tactical Training: Developing strategies and game plans (offensive, defensive, and counter-strategies). Understanding opponents, adapting in-game tactics, and decision-making.

UNIT-IV **14 Hours**

Recovery Strategies: Active vs. passive recovery. Importance of rest, sleep, and low-intensity activities in recovery.

Recovery methods like massage, ice baths and stretching.

Nutrition for Athletes: Macronutrients (carbs, proteins, fats) and their role in performance. Hydration and electrolyte balance during training and competition. Timing of meals, supplements and their effect on energy levels.

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested References:

- *Bompa, T. O., & Haff, G. G. (2009). Periodization: Theory and Methodology of Training (5th ed.). Human Kinetics.*
- *Magill, R. A. (2011). Motor Learning and Control: Concepts and Applications (10th ed.). McGraw-Hill.*
- *Zatsiorsky, V. M., & Kraemer, W. J. (2006). Science and Practice of Strength Training (2nd ed.). Human Kinetics.*
- *Baechle, T. R., & Earle, R. W. (2008). Essentials of Strength Training and Conditioning (3rd ed.). Human Kinetics.*
- *Kerr, R. (2007). Sport and Exercise Science: An Introduction. Routledge.*
- *Wilmore, J. H., & Costill, D. L. (2004). Physiology of Sport and Exercise (3rd ed.). Human Kinetics.*

Course Name: Remedial and Massage	L	T	P	Cr.
Course Code: BPE5302	4	0	0	4

Total Hours: 60

Course Learning Outcomes: By the end of this course, students will be able to:

1. Knowledge of Physiological, Chemical and Psychological effects of massage on human body
2. Gaining skill in different techniques of massage and their effects on human body.
3. Understanding the role of massage in games and sports.
4. Study about the introduction and history of remedial massage

Course Content

UNIT-I **15 Hours**

Introduction of Massage: Meaning, definition, Importance of Remedial and Massage.

Brief history of massage exercise and Principles of application of Massage.

Role of massage in game & sports.

UNIT-II **15 Hours**

Manipulation and movement: Classification of the manipulations and movements used in massage effects of each & type of manipulation of the different system of the human body

Classification of Movements (active movements, passive movements) and their effective use.

Manipulations and movement of Massage: Classification of the manipulations and movements used in massage and their effects on human body.

UNIT-III **16 Hours**

Indications and contraindications of massage movement: The Effleurage Movement, its application and benefits.

Techniques of Message: Classification of Techniques of Message, Stroking, Pressure, Percussion and Vibratory etc. and their importance and application on human body.

UNIT -IV **14 Hours**

Massage Movement on the different Parts of body.

Rehabilitation Exercises

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Mary V. L. (1956). Massage and Medical Gymnastics*
- *Joke Ernest. Scope of Exercises in Rehabilitations.*
- *Joke Ernest. Philosophy of Exercises.*
- *Horns Kans. Therapeutic Exercises.*

Course Name: Olympic Movement	L	T	P	Cr.
Course Code: BPE5303	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. After completion of this course, the learner will be able to:
2. Acquire a fundamental understanding of the Olympic movement.
3. Recognize the importance of Olympic ideals, the Olympic rings and the Olympic flag.
4. Gain knowledge about various Olympic Games and their historical significance.
5. Study the roles and functions of the International Olympic Committee (IOC)and the Indian Olympic Association (IOA)

Course Content

UNIT-I **08 Hours**

Origin of Olympic Movement: Philosophy of Olympic movement, the early history of the Olympic movement, the significant stages in the development of the modern Olympic movement, Educational and cultural values of Olympic movement

UNIT-II **08 Hours**

Modern Olympic Games: Significance of Olympic Ideals, Olympic Rings, Olympic Flag, Olympic Protocol for member countries, Olympic motto, Olympic Code of Ethics, Olympism in action, Sports for All.

UNIT-III **07 Hours**

Different Olympic Games: Para Olympic Games, Summer Olympics, Winter Olympics, Youth Olympic Games

UNIT-IV **07 Hours**

Committees of Olympic Games: International Olympic Committee, Structure and Functions, National Olympic committees and their role in Olympic movement, Olympic commission and their functions, Olympic medal winners of India

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning.

Suggested Readings:

- *Osborne, M. P. (2004). Magic tree house fact tracker: ancient Greece and the olympics: a non-fiction companion to magic tree house: hour of the Olympics. New York: Random House Books for Young Readerss*
- *Burbank, J. M., Andranovich, G. D. & Heying Boulder, C. H. (2001) Olympic dreams: the impact of mega-events on local politics: Lynne Rienner*

Course Name: Athletics (Theory Track Events) (VOC)	L	T	P	Cr.
Course Code: BPE5304	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Describe the basic structure and types of athletic events.
2. Understand the fundamental techniques used in sprints, long jump, and shot put.
3. Explain the basic rules and officiating responsibilities for selected events.
4. Appreciate the importance of athletics as a foundational sport in physical education.

Course Content

UNIT-I **8 Hours**

Introduction to Athletics

- Meaning, scope and importance of athletics.
- **Brief history of athletics:** International and Indian context.
- **Classification of events:** Track, Field, and Combined Events.

UNIT-II **8 Hours**

Track Events

- **Basics of sprint races (100m, 200m, 400m):** Start, running technique, and finish.
- **Introduction to relay races:** Baton exchange zones and techniques.

UNIT-III **8 Hours**

Field Events

- **Long Jump**: Basic phases-approach run, take off, flight, landing and Corrections.
- **Shot Put**: Grip, stance and basic throwing technique (glide technique preferred for beginners) and Corrections.

UNIT-IV **6 Hours**

Rules and Officiating

- General rules for track and field events (as per World Athletics).
- **Duties of officials:** starter, timekeeper, umpire and judge.
- Basics of layout/marking of Javelin sector and hammer sector.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning.

Suggested Readings:

- *Yobu, A. Track and Field: Theory, Practice and Officiating. Friends Publications.*
- *Doherty, J. Track and Field: A Guide for Coaches and Athletes. Prentice Hall.*
- *Ajmer Singh et al. Essentials of Physical Education. Kalyani Publishers.*
- *World Athletics. Official Competition Rules. www.worldathletics.org*

Course Name: Athletics (Practical Track Events) (VOC)	L	T	P	Cr.
Course Code: BPE5305	0	0	4	2

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Demonstrate correct techniques in sprinting, jumping, and throwing.
2. Perform baton exchanges and understand basic relay strategies.
3. Set up and mark standard athletic facilities for competitions.
4. Act as an official in basic track and field events.
5. Organize and participate in inter-class/intra-mural athletics meets.

Course Content

Sprints (100m & 200m)

- Correct starting technique: crouch start and use of starting blocks
- Running posture, stride length, arm action and finish

Relay Races:

- Baton grip and exchange techniques (upsweep/down-sweep methods)
- Practicing changeover within the exchange zone

Steeple chase

Course Name: Internship (6 Week)	L	T	P	Cr.
Course Code: BPE5306	0	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Apply classroom knowledge to real-world physical education and sports settings.
2. Demonstrate effective coaching and teaching skills in various activities.
3. Organize and manage sports events and fitness programs efficiently.
4. Communicate professionally with students, athletes and staff.

Course content

6-week internship compulsory for students

Total Lessons: A minimum of 30 lessons.

- 20 lessons to be conducted in schools.
- 10 lessons to be conducted within the college/institution/department.

Internship includes a minimum of 30 teaching lessons: 20 in schools and 10 teaching lessons in the college. It involves classroom teaching, practical sports coaching, and community engagement. Students observe, plan and deliver lessons under supervision, with continuous assessment and reflection. Institutions must partner with recognized schools for practice teaching.

Semester-VI

Course Name: Sports Medicine	L	T	P	Cr.
Course Code: BPE6350	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Demonstrate a breadth of knowledge across the spectrum of the exercise sciences and a deeper understanding in the areas of physiology, motor behavior and biomechanics.
2. Apply the scientific method to understand, evaluate and solve problems in the exercise sciences.
3. Utilize the central components of a liberal education, including critical thinking, information literacy, oral and written communication and quantitative reasoning skills, in analyzing problems in the exercise sciences.
4. Understand the concept of Upper limb and thorax injuries

Course Content

UNIT-I **14 Hours**

Sports Medicine: Meaning, Definition, Aims, Objectives, Modern Concepts and Importance

Athletes Care and Rehabilitation: Contribution of Physical Education Teachers and Coaches, Need and Importance of the study of sports injuries in the field of Physical Education

Prevention of injuries in sports: Common sports injuries, Diagnosis, First Aid, Treatment, Laceration, Blisters, Contusion, Strain, Sprain, Fracture, Dislocation and Cramps

Bandages: Types of Bandages, trapping and supports

UNIT-II **16 Hours**

Basic Rehabilitation: Basic Rehabilitation, Strapping/tapping, definition, principles precautions contraindications

Proprioceptive neuromuscular facilitation: Definition hold, relax, repeated contractions

Show reversal technique exercises: Isotonic, Isokinetic, Isometric, Stretching Definition, types of stretching, advantages, dangers of stretching, manual muscle grading

UNIT-III **15 Hours**

Upper limb and thorax injuries: Shoulder-sprain, strain, dislocation and strapping,
Elbow: Sprain, strain, strapping
Wrist and Fingers: Sprain strain, strapping
Thorax, Rib fracture: Breathing exercises, relaxation techniques, freehand exercise, stretching and strengthening exercise for shoulder, elbow, wrist and hand, Supporting and aiding techniques and equipment for upper limb and thorax injuries

UNIT-IV **15 Hours**
Lower limb and abdomen injuries: Hip-adductor strain, dislocation, strapping. Knee: sprain, strain, strain, strapping
Ankle: sprain, train, strapping
Abdomen: Abdominal wall, contusion, abdominal muscles train

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning.

Suggested Readings:

- *Christopher M. Norris. (1993). Sports Injures Diagnosis and Management for Physiotherapists. East Ki lbride: Thomson Litho Ltd*
- *James, A. Gould & George J. Davies, (1985), Physical Therapy, Toronto: C.V. Mosby Company.*
- *Morri B. Million (1984) Sports Injuries and Athletic Problem, New Delhi: Surjeet Publication,*
- *Pande. (1998). Sports Medicine. New Delhi: Khel Shitya Kendra*
- *The Encyclopedia of Sports Medicine, (1998), The Olympic Book of Sports Medicine, Australia: Tittel Blackwell Scientific publications*
- *Practical: Anthropometric Measurements*

Course Name: Basic Statistics in Physical Education and Sports	L	T	P	Cr.
Course Code: BPE6351	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand and apply basic statistical techniques to analyze data in the context of Physical Education and Sports.
2. Develop proficiency in descriptive statistics, probability, sampling, hypothesis testing, and inferential statistics.
3. Gain the ability to use statistical software for data analysis and presentation in sports-related research.
4. Organize raw data into meaningful frequency distributions.

Course Content

UNIT-I **15 Hours**

Definition of Statistics: Understanding the role of statistics in Physical Education and Sports.

Types of Data: Quantitative vs. qualitative data, continuous vs. discrete data. **Levels of Measurement:** Nominal, Ordinal, Interval and Ratio scales. **Sources of Data in Sports:** Data collection in sports performance, fitness assessments, and sports events.

Organization of Data: Tabulation and classification of data; frequency distribution.

UNIT-II **15 Hours**

Measures of Central Tendency: Mean, median and mode, definitions, formulas and applications in sports and physical education.

Measures of Dispersion: Range, variance and standard deviation, understanding variability in sports performance.

UNIT-III **16 Hours**

Introduction to Probability: Basic probability concepts and their application in predicting outcomes in sports.

Probability Distributions: Normal distribution, binomial distribution, and their applications in sports data analysis.

Sampling Methods: Types of sampling (random, stratified and cluster sampling) and their relevance to sports research.

UNIT-IV **14 Hours**

Hypothesis Testing: Null and alternative hypotheses, Type I and Type II errors and significance levels in sports data analysis.

T-tests and ANOVA: Application of t-tests (independent, paired) and analysis of variance (ANOVA) in comparing sports performances.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning.

Suggested Readings:

- *Field, A. Discovering Statistics Using SPSS (2013)*
- *Siegel, S., & Castellan, N.J. Nonparametric Statistics for the Behavioural Sciences (1988)*
- *Garrett, H.E. Statistics in Psychology and Education (2009)*
- *Kumar, A. Research Methodology and Statistics in Physical Education (2015)*
- *Bland, M. An Introduction to Medical Statistics (2015)*
- *Mendenhall, W., & Sincich, T. Statistics for Business and Economics (2016)*
- *Kothari, C.R. Research Methodology: Methods and Techniques (2004)*
- *Best, J.W.,* & Kahn, J.V. Research in Education (2014)

Course Name: Biomechanics	L	T	P	Cr.
Course Code: BPE6352	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Comprehend the laws of physics and identify their role in human body locomotion.
2. Grasp the anatomical and biomechanical bases of human movement.
3. Recognize the physiological bases of human movement.
4. Identify the role of biomechanics in exercise and games.

Course Content

UNIT-I **14 Hours**

Introduction: Meaning, nature, role and scope of Sports Biomechanics, Meaning of axis and planes, Types and movements in axis and planes, Dynamics, kinematics, kinetics, Statics, Centre of gravity, Line of gravity, Vectors and Scalars

UNIT-II **15 Hours**

Muscle Action: Structural classification of muscles, characteristics of muscle tissue, muscles fiber types, Reciprocal innovation, all or none law, Types of muscles contraction, Role of muscles, Angle of pull, Two-joint muscles, Reflex-action, Muscle tone, Origin, insertion and action of muscles, Pectoral is major and minor, deltoid, biceps, triceps (Anterior and Posterior).

UNIT-III **15 Hours**

Motion: Meaning and definition of motion, Types of motion, linear motion, angular motion, general motion, uniform motion, Principals related to the law of Inertia, law of acceleration and law of counter force.

Force: Meaning and definition of force, sources of force, force components, Force applied at an angle pressure, Centripetal force centrifugal force

Friction: Buoyancy, Spin

UNIT-IV **16 Hours**

Projectile and Lever: Freely falling bodies, Projectiles, equation of projectiles, Stability, factors influencing equilibrium, guiding principles for stability, static and dynamic stability, Meaning of work, power, energy, kinetic energy and potential energy Leverage, classes of lever, practical application, Water resistance, Air resistance, aero dynamics

Analysis of movement: Types of analysis, Kinesiological, Biomechanical, Cinematographic, Methods of analysis, qualitative, quantitative, predictive,

Principles and Analysis of following movement (Throwing, Striking, Jumping, Squat, Dead Lift)

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Deshpande, S.H. (2002). Manav Kriya Vigyan–Kinesiology (Hindi Edition). Amravati.*
- *Hanuman Vyayam Prasarak Mandal.*
- *Hoffman, S. J. (2005). Introduction to Kinesiology. Human Kinesiology publication In.*
- *Steven Roy, & Richard Irvin. (1983). Sports Medicine. Prentice HallInc., New Jersery.*
- *Thomas. (2001). Manual of structural Kinesiology. Mc Graw Hill, New York.*
- *Uppal, A. K. & Lawrence, Mamta. (2004). M P Kinesiology. Friends Publication, India.*
- *Uppal, A. (2004). Kinesiology in Physical Education and Exercise Science. Friends publications, Delhi.*
- *Williams, M. (1982). Biomechanics of Human Motion. Saunders Co, Philadelphia.*

Course Name: Fitness Centre Management	L	T	P	Cr.
Course Code: BPE6353	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Become professionals in Personal Fitness Training.
2. Enhance the quality of Physical Education Teachers.
3. Summarize the basic concept of Management.
4. Comprehend the basic Fitness Management.

Course Content

UNIT-I **08 Hours**

Introduction to Fitness Centre Management, Concept and definitions of Fitness Centre Management, Purpose and Scope of Fitness Centre Management, Basic Skills and of Fitness Centre Management, Different level in Fitness Centre Management of physical Education

UNIT-II **08 Hours**

Process of Management, Planning, Administration and Supervision, Personal Management/Staffing, Directing, Controlling

UNIT-III **08 Hours**

Office Management, Concept, Meaning and Definition of Office Management, Element of Office Management, Function of Office Management, Layout and Principles of Office Management

UNIT-IV **06 Hours**

Practical Aspects, Medicine ball and Resistance Band Training, Pilates and Functional Strength Training

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Beashel, P., & Taylor, J. (1996) Advance Studies in Physical Education and Sports. U.K.: Thomas Nelson and Sons Ltd*
- *Bucher, C. A. (2002). Management of Physical Educational and Sports. (12thEd.). USA: Mc Garw Hill Co.*

- *Chakrarborti, S. (2007). Sports Management. New Delhi: Friends Publication.*
- *Frosdick, S., & Walley, L. (2003). Sports and Safety Management USA: Adivision of Reed* Education and Professional Publishing Ltd

Course Name: Practical Application in Test and Measurement (Theory) (VOC)	L	T	P	Cr.
Course Code: BPE6354	2	0	0	2

Total Hours: 30

Course Learning Outcomes After completion of this course, the learner will be able to:

1. Understand Testing Principles: Knowledge of various test types, characteristics, and applications.
2. Measure Fitness and Skills: Ability to assess cardiovascular fitness, strength, flexibility, and motor skills.
3. Analyze and Interpret Data: Use statistical tools to interpret results and make decisions.
4. Report and Provide Feedback: Create clear reports and offer actionable feedback for improvement.

Course Content

UNIT-I **8 Hours**

Concepts of Testing, Measurement and Evaluation: Definitions, importance, and characteristics of good tests (validity, reliability, objectivity, practicality).

Types of Tests: Fitness tests (cardiovascular, strength, flexibility), motor skill tests (agility, speed). Ethics in Testing: Fairness, transparency and objectivity in test design and administration.

UNIT-II **8 Hours**

Cardiovascular Fitness: VO2 max, Cooper 12-minute run, Harvard Step Test and interpretation.

Strength and Endurance: 1-RM bench press, Push-Up Test, Sit-and-Reach Test.

Flexibility: Importance and measurement of flexibility.

UNIT-III **8 Hour**

Motor Skill Evaluation: Assessing coordination, agility, and reaction time (e.g., basketball dribbling).

Sports-Specific Skill Testing: Designing skill tests for sports (volleyball serving, basketball shooting).

Developing Evaluation Rubrics: Creating consistent criteria for skill assessment.

UNIT-IV **6 Hours**

Data Recording: Methods for accurate data collection and organization.

Statistical Analysis: Using mean, median, mode and standard deviation to analyze test results.
Test Reporting: Writing reports, interpreting results and providing feedback for improvement.

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning.

Suggested Readings:

- *Thomas, J. R., Nelson, J. K., & Silverman, S. J. Research Methods in Physical Activity. Human Kinetics, 2015.*
- *Heyward, V. H. Advanced Fitness Assessment and Exercise Prescription. Human Kinetics, 2014.*
- *Baechle, T. R., & Earle, R. W. Essentials of Strength Training and Conditioning. Human Kinetics, 2008.*
- *Wang, M. Y Fitness and Wellness: A Comprehensive Approach. Pearson, 2016.*
- *Lidor, R., & Côté, J. The Sport Psychologist's Handbook: A Guide for Sport-Specific Performance Enhancement. John Wiley & Sons, 2013.*
- *Kraemer, W. J., & Fleck, S. J. Designing Resistance Training Programs. Human Kinetics, 2012.*
- *McArdle, W. D., Katch, F. I., & Katch, V. L. Exercise Physiology: Nutrition, Energy, and Human Performance. Lippincott Williams & Wilkins, 2010.*
- *Ainsworth, B. E., Haskell, W. L., Herrmann, S. D., et al. Compendium of Physical Activities: A Second Update of Codes and MET Values. Medicine & Science in Sports & Exercise, 2011.*
- *Wilmore, J. H., & Costill, D. L. Physiology of Sport and Exercise. Human Kinetics, 2004.*
- *Kendall, F. P., McCreary, E. K., & Provance, P. G. Muscles: Testing and Function with Posture and Pain. Lippincott Williams & Wilkins, 2005.*
- *Weineck, J. Optimales Training: Theorie und Praxis der Trainingssteuerung (Optimal Training: Theory and Practice of Training Control).*
- *McGuigan, M. R. Strength and Conditioning: Biological Principles and Practical Applications. Wiley*-Blackwell, 2017.

Course Name: Practical Application in Test and Measurement (Practical) (VOC)	L	T	P	Cr.
Course Code: BPE6355	0	0	4	2

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Students will effectively administer standard fitness and motor skill tests (e.g., Cooper Test, Push-Up Test, Illinois Agility Test) and record accurate results.
2. Students will analyze test data, calculating averages, standard deviations, and interpreting results to evaluate performance in various fitness areas.
3. Students will evaluate individual performance and provide actionable feedback to help improve fitness and skill development.
4. Students will apply their knowledge to assess and evaluate fitness and motor skills in individual or group settings in sports and physical education contexts.

Course Content

Cardiovascular Fitness: Cooper 12-Minute Run Test: A test to measure cardiovascular endurance by running as far as possible in 12 minutes.

Harvard Step Test: A cardiovascular test that evaluates heart rate recovery after stepping for a specified period of time (3-minute stepping).

Strength and Endurance: Push-Up Test: Measures upper body muscular endurance by counting the maximum number of push-ups a person can perform without stopping.

Sit-Up Test: Measures abdominal endurance by counting the maximum number of sit-ups performed in one minute.

Flexibility: Sit-and-Reach Test: Assesses flexibility in the hamstrings and lower back. The student reaches forward from a sitting position to measure flexibility.

Motor Skills: Dribbling Test (Basketball/Handball): Assesses basic dribbling technique and control. For basketball, a standard dribbling test involving cone weaving; for handball, a test where students dribble the ball around cones at varying speeds.

Speed Tests: 40-Meter Sprint Test: Assesses speed by timing how long it takes an individual to sprint 40 meters from a standing start.

Agility Tests: Illinois Agility Test: Measures an individual's agility by having them navigate a course that involves running, turning and weaving through cones in a specific pattern.

Course Name: Games & Sports (Theory)	L	T	P	Cr.
Course Code: BPE6356	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand history, evolution and rules of each sport.
2. Comprehend basic skills and techniques for each sport.
3. Learn match strategies and how to apply them.
4. Understand fitness, injury prevention and coaching techniques.

Course Content

UNIT-I **8 hours**

Volleyball History & Evolution: Origin, development and Olympic inclusion.
Rules & Regulations: Court dimensions, player positions, scoring system.
Basketball History & Evolution: Origin by Dr. James Naismith, NBA development.
Rules & Regulations: Court dimensions, player positions, fouls, scoring system.
Handball History & Evolution: From field handball to indoor Olympic sport.
Rules & Regulations: Court dimensions, player positions, fouls, scoring.

UNIT-II **8 hours**

Volleyball Skills: Serving, passing, attacking, blocking.
Basketball Skills: Dribbling, shooting, passing, defence.
Handball Skills: Throwing, catching, dribbling, goalkeeping.

UNIT-III **8 hours**

Volleyball Strategies: Offensive and defensive (blocking, digging) strategies.
Basketball Strategies: Offensive (fast break, pick-and-roll), defensive (man-to-man, zone).
Handball Strategies: Offensive and defensive.

UNIT-4 **6 Hours**

Volleyball Fitness: Conditioning for strength and agility.
Injury Prevention: Preventing shoulder, knee and ankle injuries.
Basketball Fitness: Endurance, speed, agility. Injury Prevention: Knee and ankle injuries.
Handball Fitness: Agility, strength, cardiovascular fitness.
Injury Prevention: Shoulder, finger injuries.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Kessel, H., & Lande, M. Volleyball: Steps to Success, Human Kinetics, 2005.*
- *Miller, J. & O'Conner, J. Basketball Fundamentals, Human Kinetics, 2014.*
- *Krebs, K. & Ferguson, P. Handball: Techniques, Tactics, Training, Meyer & Meyer Sport, 2010.*
- *Reid, A. & Agnew*, M. Basketball: Rules and Tactics, Routledge, 2012.

Course Name: Games & Sports (Practical)	L	T	P	Cr.
Course Code: BPE6357	0	0	4	2

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Students will demonstrate mastery of essential skills like serving, passing, dribbling, shooting and goalkeeping in Volleyball, Basketball, and Handball.
2. Students will apply game-specific techniques such as spiking, defending and jumping shots during practice sessions and drills.
3. Students will improve their overall fitness, including agility, endurance and strength, through sport-specific conditioning drills.
4. Students will recognize and implement injury prevention methods, including stretching, warm-up and cool-down techniques, to ensure safe participation in physical activities.

Course Content

Volleyball: Serving, Passing, Attacking, Blocking, Marking, rules and regulations.

Basketball: Dribbling, Passing, Shooting, Defence, Marking, rules and regulations.

Handball: Passing, Catching, Dribbling, Shooting, Goalkeeping

Fitness & Conditioning Drills

Endurance: Running, jumping and circuit training.

Strength Training: Core, legs and upper body exercises.

Injury Prevention: Stretching, warm-up and cool-down routines.

Course Name: Indian Agriculture (VAC)	L	T	P	Cr.
Course Code: IKS0009	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand the significance of agriculture and irrigation in ancient Indian texts.
2. Analyze historical accounts of Indian agriculture by Greek historians and travellers
3. Explore ancient water management systems and advanced agricultural technologies.
4. Assess agricultural productivity in medieval and early modern India through historical reports.

Course Content

UNIT-I **7 Hours**

Introduction, the significance of agriculture and irrigation as emphasised in the Ramayana, Mahabharata and other texts.

UNIT-II **7 Hours**

Mention of Indian agriculture by the Greek historians and later travellers. Significance of agriculture and irrigation for the kings of Indian tradition.

UNIT-III **8 Hours**

Major water-bodies of the ancient times. The Ery system of south India. Excellence of Indian agricultural technologies as observed by more recent European observers.

UNIT-IV **8 Hours**

Productivity of Indian agriculture in medieval Thanjavur and eighteenth-century Allahabad, Chengalpattu, etc. Indian attitude towards agriculture, based on Walker and later reports.

Transactional Mode:

Seminars, Group discussion, Team teaching, Focused group discussion, Assignments, Project-based learning, Simulations, reflection and Self-assessment

Suggested Readings:

- *Srivastava, Vinod Chandra. History of Agriculture in India, up to c. 1200 AD. Vol. 5. Concept Publishing Company, 2008.*
- *Buckley, Robert Burton. The Irrigation Works of India. E. & FN Spon,*

1905.

- *Sunil Kumar. Agriculture in Ancient India. Shivalik Prakashan.*
- *Saxena, R. C., S.L. Choudhary, and Y.L. Nene. Textbook on Ancient History of Indian Agriculture. Munshiram Manoharlal Publishers.*

Semester- VII

Course Name: Anthropometry	L	T	P	Cr.
Course Code: BPE7400	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand the fundamental concepts and historical context of anthropometry and its relevance in physical education and health.
2. Learn the techniques and methods of anthropometric measurement for body composition and somatotyping.
3. Apply anthropometric measurements to assess physical fitness, health and sports performance.
4. Evaluate the impact of body types and measurements on training, nutrition and athletic success.

Course Content

UNIT-I **15 Hours**

Kin-anthropometry: Meaning, Importance and application of kin-anthropometry data in sports

Anthropometry: Meaning, Classification, working and utility of anthropometric instrument, location of different landmarks on the body.

Anthropometric Measurements: Measuring circumference, diameter, Skill for anthropometry measurements

UNIT-II **14 Hours**

Growth: Meaning, importance, Physical Growth, normal growth in adolescence

Maturation: Meaning, importance and scope, measurement of maturity

Physique: Meaning, types and role in sports

UNIT-III **16 Hours**

Body Proportion: Meaning, importance and sports specific body proportion and indices

Body Mass Index (BMI): Meaning, method of determination and importance in sports

Body composition: Meaning, importance, scope in sports

UNIT-IV **15 Hours**

Somatotyping: Meaning, importance & scope in sports, Sheldon and Heath & Carter Method of Somatotyping

Classification of somatotype, Somato chart and Somato plot
Determination of body composition: Muscle mass, bone mass and fat mass.

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning.

Suggested Readings:

- *Weiner, J. S., & Lourie, J. A. – Human Adiposity (Anthropological Series). Oxford University Press, 1981.*
- *Heyward, V. H. – Advanced Fitness Assessment and Exercise Prescription. Human Kinetics, 2014.*
- *Norton, K., & Olds, T. – Anthropometrica: A Textbook of Body Measurement for Sports and Health Education. UNSW Press, 1996.*
- *Carter, J. E. L., & Heath, B. H. – Somatotyping: Development and Applications. Cambridge University Press, 1990.*
- *Ross, W. D., & Marfell-Jones, M. – Kinanthropometry and Exercise Physiology. Routledge, 1991.*

Course Name: Sports Business & Management	L	T	P	Cr.
Course Code: BPE7401	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand the basic principles of sports business and management in terms of marketing, finance, and leadership.
2. Learn the key aspects of sports marketing, including sponsorships and branding in the sports industry.
3. Analyze the financial challenges and opportunities in the sports business sector.
4. Apply ethical decision-making and leadership principles within the context of sports management and governance.

Course Content

UNIT-I **15 Hours**

Definition and Scope: Understanding the sports business industry, including sports marketing, management and economics.

Historical Overview: The evolution of the sports industry, from traditional sports clubs to modern professional leagues and franchises.

UNIT-II **14 Hours**

Sports Marketing Fundamentals: Understanding the 4 Ps (Product, Price, Place, Promotion) in sports marketing.

Branding and Promotion in Sports: How sports organizations, athletes and teams build brands, including digital and traditional marketing strategies.

UNIT-III **16 Hours**

Revenue Streams in Sports: Ticket sales, broadcasting rights and merchandise, sponsorship, and player transfers.

Budgeting and Financial Planning: How sports organizations budget and allocate resources for team operations, marketing and infrastructure.

UNIT-IV **15 Hours**

Leadership in Sports Organizations: Key management roles in sports, including general managers, coaches and executives.

Leadership styles and their impact on team performance and organizational culture.

Ethics in Sports Management: Issues related to doping, corruption, player behaviour and fair play. Ethical decision-making in sports management.

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning.

Suggested Readings:

- *Shilbury, D., & Ferkins, L. – Sport Management: Principles and Applications. Routledge, 2015.*
- *Chelladurai, P. – Sports Management: A Canadian Perspective. Thompson Educational Publishing, 2006.*
- *Sandler, D. M. – Sports Marketing and Sponsorship. Wiley, 2011.*
- *Bowie, D. – Sport Business Management. Routledge, 2013.*
- *Mullin, B. J., Hardy, S., & Sutton, W. A. – Sport Marketing. Human Kinetics, 2014.*

Course Name: Anthropometry Field Testing (PC)	L	T	P	Cr.
Course Code: BPE7402	0	0	8	4

Total Hours: 120

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand the principles and applications of anthropometry in the context of physical education and sports.
2. Perform standard anthropometric measurements using correct techniques and equipment.
3. Identify various components of physical fitness and administer field tests to evaluate them.
4. Analyse the data obtained from fitness tests and anthropometric assessments for talent identification and training planning.

Course Content

120 Hours

- **Introduction to Anthropometry:**
  - Guidelines and standard protocols for field measurements.
  - Ethical considerations and informed consent.
- **Basic Body Measurements**
  - Stature (Standing Height)
  - Sitting Height
  - Body Weight
  - Arm Span and Limb Lengths
  - Upper and Lower Extremity Lengths
- **Girth and Circumference Measurements**
  - Chest, Waist, Hip, Thigh, Calf, Arm, Forearm
  - Proper techniques using non-elastic measuring tape
  - Interpretation and fitness relevance
- **Skinfold and Body Composition Analysis**
  - Skinfold measurement sites: Triceps, Biceps, Subscapular, Suprailiac, Thigh
  - Use of skinfold calipers
  - Estimating body fat percentage using equations (e.g., Jackson & Pollock)
- **Practical Application and Record Preparation**
  - Conducting a complete anthropometric profile of a subject
  - Maintaining individual assessment records
  - Analysis and interpretation of collected data

Course Name: Gymnastics (Theory) (VOC)	L	T	P	Cr.
Course Code: BPE7403	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand the history, types, and importance of gymnastics in both competitive and recreational contexts.
2. Learn the basic gymnastics skills and techniques required for both artistic and floor exercises.
3. Analyze the structure of gymnastics competitions, including scoring systems and judging criteria.
4. Apply gymnastics techniques and principles to improve fitness, coordination and flexibility.

Course Content

UNIT-I **8 Hours**

Definition and Scope Understanding gymnastics as a sport that involves exercises requiring physical strength, flexibility, balance, and coordination. **History of Gymnastics:** Origins of gymnastics from ancient Greece to modern-day Olympic gymnastics.

UNIT-II **8 Hours**

Posture and Alignment Importance of posture and alignment in performing gymnastics routines safely and effectively.

Apparatus in Artistic Gymnastics: Introduction to the equipment used in gymnastics, vault, bars, beam, rings and pommel horse.

UNIT-III **8 Hours**

Scoring System Overview of the FIG (International Gymnastics Federation) scoring system, including difficulty and execution scores.

Competition Structure: Understanding the structure of gymnastics competitions at different levels, from local to international events like the Olympics and World Championships.

UNIT-IV **6 Hours**

Benefits of Gymnastics: Physical, mental, and emotional benefits of practicing gymnastics, including enhanced flexibility, strength and coordination.

Gymnastics as a Recreational Activity: The role of gymnastics in recreational and fitness programs for individuals of all ages.

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning.

Suggested Readings:

- *Mack, G. L. – The Complete Guide to Gymnastics. Meyer & Meyer Sport, 2006.*
- *Chouinard, A., & Allen, R. – Gymnastics: A Basic Approach. Human Kinetics, 2011.*
- *Sullivan, D. – The Art of Gymnastics: A Step-by-Step Approach. Human Kinetics, 2012.*
- *Baumgartner, T. A., & Jackson, A. S. – Measurement for Evaluation in Physical* Education and Exercise Science. McGraw-Hill, 2016.

Course Name: Gymnastics (Practical) (VOC)	L	T	P	Cr.
Course Code: BPE7404	0	0	4	2

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Develop proficiency in fundamental gymnastics skills, including rolling, cartwheels, handstands, and tumbling.
2. Enhance floor exercise routines by combining gymnastics skills with dance elements and acrobatics.
3. Master basic apparatus techniques in artistic gymnastics, including vault, bars, and pommel horse skills.
4. Improve flexibility, strength, and conditioning, which are essential for excelling in both gymnastic performance and injury prevention.

Course Content

Total Hours 60

Rolling Techniques: Forward role, Backward role, Hand stand and roll, Straddle forward role, Straddle backward role, Somersaults, Cart wheels Balance and Posture,

Acrobatic Events: Common Vault moves- front handspring, Yurchenko, Amanar, running start, leap off a springboard, athletic maneuver involving a vaulting horse, landing

Balance Beam: Handsprings, backhand springs, back saltos, turns and split jumps

Course Name: Alternative and Emerging Sports (Discipline Elective-III)	L	T	P	Cr.
Course Code: BPE7405	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Identify and understand the key characteristics of alternative and emerging sports.
2. Analyze the role of technology and digital platforms in the promotion and development of these sports.
3. Evaluate the marketing strategies, sponsorships and event management techniques used in emerging sports.
4. Assess the challenges faced by alternative sports in terms of regulation, safety and public perception.

Course Content

UNIT-I **15 Hours**

Definition and Scope Understanding what constitutes alternative and emerging sports and how they differ from traditional sports.

History and Evolution: Origins and development of alternative sports, including extreme sports and non-traditional activities.

Types of Alternative Sports: Adventure sports, freestyle sports, e-sports, and others.

UNIT-II **16 Hours**

Extreme Sports Skateboarding, snowboarding, BMX, surfing and rock climbing.

Adventure Sports: Paragliding, kayaking, rafting, mountaineering and off-roading.

Water Sports: Kitesurfing, wakeboarding, paddle boarding and sailing.

Motor Sports: Rally, motocross, and Formula 1.

UNIT-III **14 Hours**

E-Sports Growth of competitive video gaming, major e-sports events and its global impact.

Digital Platforms: Social media, streaming services and online communities' role in promoting emerging sports.

Technology-Driven Sports: Augmented reality (AR), virtual reality (VR), and wearable technologies enhancing performance in alternative sports.

UNIT-IV **15 Hours**

Event Management Organizing and promoting alternative sports events, including local, national and international competitions.

Marketing and Sponsorship: How emerging sports attract sponsors, create brands, and market to niche audiences

Challenges in Emerging Sports: Regulatory issues, safety concerns, commercialization and public perception.

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning.

Suggested Readings:

- *Heath, D. S. – Alternative Sports: An Introduction. Routledge, 2007.*
- *Shah, S. – The Globalization of Extreme Sports. Palgrave Macmillan, 2011.*
- *Langer, M. – E-sports: The Rise of Competitive Gaming. Bloomsbury, 2020.*
- *Burke, R. – Extreme Sports: The Basics. Routledge, 2014.*
- *Gill, D. L., & Williams, L. – Psychology of Physical Activity: Determinants, Well-Being and Interventions. Routledge, 2016.*

Course Name: Disability Sports and Paralympic Studies (Discipline Elective-III)	L	T	P	Cr.
Course Code: BPE7406	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Gain a comprehensive understanding of the history, evolution, and significance of disability sports and the Paralympic movement.
2. Learn the Paralympic classification system and how it ensures fair competition among athletes with disabilities.
3. Analyze the role of national and international organizations in promoting disability sports, focusing on opportunities and challenges.
4. Apply coaching and training techniques for athletes with disabilities, considering the advancements in adaptive equipment and sports psychology.

Course Content

UNIT-I **15 Hours**

Definition and Scope: Understanding disability sports and their significance in promoting physical activity and inclusion for individuals with disabilities.
History and Evolution: The development of disability sports from the early 20th century to the present day.

UNIT-II **15 Hours**

History of the Paralympic Games: Origins, milestones, and the growth of the Paralympic movement. From the Stoke Mandeville Games to the modern-day Paralympic Games.
Paralympic Classification System: Understanding the classification of athletes based on their disability type and severity to ensure fair competition.

UNIT-III **16 Hours**

National Programs and Organizations: The role of national sports organizations for athletes with disabilities, such as National Paralympic Committees (NPCs) and their contribution to sports development. Inclusion of
Disability Sports in Mainstream Sports: The integration of disability sports into schools, universities and professional sports clubs.

UNIT-IV **14 Hours**

Coaching Athletes with Disabilities: Techniques and strategies for coaching athletes with physical, intellectual and sensory disabilities.

Adaptive Sports Equipment: Technology and innovation in developing adaptive equipment (e.g., specialized wheelchairs, prosthetics and adaptive swimming devices).

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning.

Suggested Readings:

- *Vanlandewijck, Y., & Thompson, W. R. – The Paralympic Athlete: Issues and Perspectives. John Wiley & Sons, 2017.*
- *Gutherie, E. T., & Larkin, D. – Disability Sport and the Paralympic Movement: A Global Perspective. Routledge, 2016.*
- *Paralympic.org – The Story of the Paralympic Games. International Paralympic Committee.*
- *Steadward, R. D., & Wheeler, G. D. – Adapted Physical Activity, Recreation, and Sport: Cross disciplinary and Lifespan (6th Edition). McGraw-Hill, 2013.*
- *Sherrill, C. – Adapted Physical Activity, Recreation, and Sport: Cross disciplinary and Lifespan. McGraw-Hill, 2004.*

Semester– VIII

Course Name: Statistics in Physical Education and Sports	L	T	P	Cr.
Course Code: BPE8450	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Interpret basic approaches to research.
2. Perform statistical analysis of a basic research work.
3. Apply various statistical tests to research work in the field of physical education.
4. Analyse the Statistical data in the field of physical education and sports.

Course Content

UNIT-I **15 Hours**

Introduction: Meaning, Definition, Need and Importance of Statistics in Physical Education

Types of Statistical Process: descriptive, comparative, inferential, predictive, Attribute and variable, Frequency distribution, raw scores, Single scores Types of data, Population and sample, Parameters and statistics

UNIT-II **15 Hours**

Data Classification, Tabulation and Measures of Central Tendency: Meaning, uses and construction of frequency table, Meaning, purpose, calculation and advantages of Measures of central tendency, mean, median and mode.

Measures of Dispersions and Scales: Meaning, purpose, calculation and advances of Range, Quartile deviation, Mean deviation, Standard deviation, Probable error, meaning, purpose, calculation and advantages of scoring scales- Sigma scale, Z scale, Hull scale

UNIT-III **15 Hours**

Probability Distributions and Graphs: Meaning of probability

Normal curve: principles of normal curve and properties of normal curve

Divergence form normality: Skewness and Kurtosis

Graphical representation in Statistics: Line diagram, bar

diagram, Histogram, Frequency Polygon

UNIT-IV **15 Hours**

Inferential and Comparative Statistics:

Tests of significance: Independent "t" test, dependent "t" test, chi square test, level of confidence and interpretation of data

Correlation: Meaning of correlation, co-efficient of correlation, calculation of co-efficient of correlation by the product moment method and rank difference method, concept of ANOVA and ANCOVA

Transaction Mode:

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Best, J.W. (1971). Research in Education, Prentice Hall, Inc, New Jersey.*
- *Clark, D.H. (1999). Research Problem in Physical Education, II edition. Prentice Hall, Inc., Eaglewood Cliffs.*
- *Jerry, R. Thomas & Jack, K. Nelson. (2000). Research Methods in Physical Activities. Human Kinetics, Illonosis.*
- *Kamlesh, M.L. (1999). Research Methodology in Physical Education and Sports. KSK Publishers, New Delhi.*
- *Rothstain, A. (1985). Research Design and Statistics for Physical Education. Prentice Hall, Inc., Englewood Cliffs.*
- *Sivarama Krishnan, S. (2006). Statistics for Physical Education. Friends Publication, Delhi.*

Course Name: Service Learning	L	T	P	Cr.
Course Code: BPE8451	0	0	8	4

Total Hours: 120

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Participate in community activities to establish connections and build relationships.
2. Evaluate community needs through conversations with community members.
3. Develop and implement initiatives that address community needs.
4. Reflect on personal growth, community impact and ethical considerations related to service activities.

Course Content

This course aims to engross students in meaningful service-learning activities that foster community linking. Students will actively participate in community-based projects, collaborate with community members and organizations and reflect on the impact of their service activities. Through this experiential learning approach, students will develop a deep understanding of community needs, build relationships with diverse stakeholders and contribute to community development.

In this course, students are expected to be present in the community throughout the semester and reflect on their experiences regularly after working with them. The students will use experiential learning for providing service learning. They will be able to analyse and have understanding of the key theoretical, methodological and applied issues.

Select 10 community related activities which are to be performed in nearby villages. Students in groups of 8-10 shall work on one activity.

Evaluation Criteria:

1. Every activity shall be evaluated on the same day out of 10 marks.
2. Total 10 activities out of 100 shall be evaluated and submitted to Examination branch.

Activity Evaluation:

1. Type of activity- 2 marks
2. Participation of student- 2 marks
3. Engagement in the activity- 2 marks
4. Outcome of the activities- 2 marks
5. Attendance 2 marks

Transaction Mode:

Problem-solving learning, Blended learning, Gamification, Cooperative learning, Inquiry-based learning, Visualization, Group discussion, Experiential learning, Active participation.

Course Name: Research Methodology	L	T	P	Cr.
Course Code: BPE8452	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand and apply the basics of research methodology in research and project work, including selecting an appropriate research design.
2. Collect and edit data effectively and analyze it appropriately, enhancing their prospects in higher education.
3. Demonstrate the ability to choose research methods suitable for specific research objectives.
4. Develop proficiency in qualitative and quantitative data analysis and presentation techniques.

Course Content

UNIT-I **14 Hours**

Research: its concept, nature, scope, need and Objectives of Research, Research types, Research methodology, Research process–Flowchart, description of various steps, Selection of research problem.

UNIT-II **16 Hours**

Research Design: Meaning, Objectives and Strategies of research, different research designs, important experimental designs,

Methods of Data Collection and Presentation: Types of data collection and classification, Observation method, Interview Method, Collection of data through Questionnaires, Schedules, data analysis and interpretation, editing, coding, content analysis and tabulation.

UNIT-III **16 Hours**

Sampling Methods: Probability Sampling methods, Random Sampling, Systematic Sampling, Stratified Sampling, Cluster Sampling and Multistage Sampling, Non-probability Sampling methods, Sample size

UNIT-IV **14 Hours**

Report writing and Presentation: Types of reports, Report Format – Cover page, Introductory page, Text, Bibliography, Appendices, Typing instructions, Oral Presentation

Ethical Issues- Dishonesty, Ethical issues Regarding Copy right, responsibilities of researchers

Transaction Mode:
Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

Suggested Readings:

- *Thomas, J. R., & Nelson, J. K. – Research Methods in Physical Activity (7th Edition). Human Kinetics, 2015.*
- *Kaufman, A. – Research Methods in Sports Science: A Practical Guide. Routledge, 2017.*
- *Miller, R. L., & Brewer, J. D. – The A-Z of Social Research: A Dictionary of Key Social Science Research Concepts. Sage Publications, 2003.*
- *Creswell, J. W. – Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (5th Edition). Sage Publications, 2017.*
- *Babbie, E. – The Practice of Social Research (14th Edition). Cengage Learning, 2013.*
- *Bourgeois, T. L. – Research Methods for the Behavioral Sciences. Cengage Learning, 2015.*
- *Vealey, R. S. – Psychological Foundations of Sport (2nd Edition). Human Kinetics, 2007.*

Course Name: Dissertation	L	T	P	Cr.
Course Code: BPE8453	0	0	0	12

Total Hours: 180

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Develop a research plan for independent study within the field of physical education.
2. Familiarize themselves with various data collection methods applicable to physical education research.
3. Recognize and address challenges encountered during the research process.
4. Acquire the ability to interpret research findings critically and draw appropriate conclusions.

Course Content

180 Hours

- A candidate shall undertake a dissertation in the M.P.Ed. – VIII Semester and must submit a research synopsis for approval by the Head of the Department, based on the recommendation of the Departmental Research Committee (DRC).
- The candidate is required to publish at least one research paper in a Peer Reviewed journal.
- The completed dissertation must be submitted no later than one week before the commencement of the VIII Semester examinations.
- The candidate must also appear for a Viva-Voce examination, which will be conducted by the DRC.