

GURU KASHI UNIVERSITY



Bachelor of Physical Education

Session: 2024-25

Department of Physical Education

GRADUATE ATTRIBUTE

After the completion of this course, the graduates will encompass a combination of physical education knowledge, skills, and professional competencies preparing them for careers in physical education, sports coaching, fitness training, and related fields.

PROGRAMME LEARNING OUTCOMES

1. Acquire knowledge of the structure and function of the human body, including the musculoskeletal, cardiovascular, respiratory and nervous systems.
2. Develop skills and expertise in various sports and physical activities, such as team sports, individual sports, fitness training, and recreational activities.
3. Acquire the knowledge and skills needed to effectively teach and coach individuals or groups in physical education settings, including lesson planning, instructional techniques, and assessment strategies.
4. Discover the principles of health and wellness promotion and how to design and implement programs that promote physical activity, healthy lifestyles, and overall wellness
5. To provide physical education programs for persons with disabilities or persons with special needs, acquire the knowledge and skills to adapt activities and instructional strategies to meet their unique needs.
6. Attain the ability to analyze and evaluate scientific research related to physical education and sport, and apply critical thinking skills to solve problems and make informed decisions.
7. Comprehend and adhere to professional ethics and standards in the field of physical education, demonstrating professionalism, integrity and respect for diverse populations.
8. Enhance communication skills, both verbal and written, and develop the leadership qualities necessary for effective collaboration, instruction, and interaction with students, colleagues, and other stakeholders.

Programme Structure

Semester I						
Course Code	Course Title	Type of Course				
			L	T	P	Credit
BPD111	Physiology of Exercise	Core	4	0	0	4
BPD112	Tests, Measurement and Evaluation in Physical Education	Core	4	0	0	4
BPD113	Communication Skills	Compulsory Foundation	2	0	0	2
BPD107	Track and Field-I	Skills Based	0	0	4	2
BPD108	Games & Sports-I	Skills Based	0	0	4	2
BPD109	Drill and Marching	Entrepreneurship	0	0	4	2
BPD118	Sports Technology	Multi-disciplinary	3	0	0	3
Discipline Elective-I (Any one of the following)						
BPD115	Value and Environmental Education	Discipline Elective-I	3	0	0	3
BPD116	Health Education and Sports Nutrition					
Open Elective Course						
XXX	XXX	IDC	2	0	0	2
Total			18	0	12	24
Open Elective Course (For other Department)						
OEC029	Sports Nutrition and Weight Management	OE	2	0	0	2

Semester II						
Course Code	Course Title	Type of Course				
			L	T	P	Credit
BPD211	Sports Biomechanics & Kinesiology	Core	4	0	0	4
BPD212	Sports Psychology	Core	4	0	0	4
BPD207	Track and Field II	Skills Based	0	0	4	2
BPD208	Games & Sports II	Skills Based	0	0	4	2
BPD217	Teaching Practice I	Skill Based	0	0	4	2
BPD213	Gymnastic	Entrepreneurship	0	0	4	2
BPD210	Leadership Skills	Value Added Course	2	0	0	2
BPD299	MOOC	MOOC	0	0	0	2
Discipline Elective-II(Any one of the following)						
BPD215	Applied Statistics in Physical Education	Discipline Elective-II	3	0	0	3
BPD216	Education Technology in Physical Education					
Total			13	0	16	23

Semester III						
Course Code	Course Title	Type of Course				
			L	T	P	Credit
BPD314	Scientific Principles of Sports Training	Core	4	0	0	4
BPD315	Sports Medicine	Core	4	0	0	4
BPD323	Yogic Science	AEC	2	0	0	2
BPD311	Track and Field III	Skills Based	0	0	4	2
BPD316	Games Specialization	Skills Based	0	0	4	2
BPD317	Teaching Practices II	Entrepreneurship	0	0	4	2
BPD399	MOOC	MOOC	0	0	0	2
Discipline Elective-III (Any one of the following)						
BPD319	Olympic Movement	Discipline Elective-III	3	0	0	3
BPD320	Sports Engineering					
BPD321	Physical Fitness and Wellness					
Discipline Elective-IV (Any one of the following)						
BPD324	Adapted Physical Education	Discipline Elective-IV	3	0	0	3
BPD325	Fitness Centre Management					
BPD326	Sports Sociology					
	Total		16	0	12	24

Semester IV						
Course Code	Course Title	Type of Course				
			L	T	P	Credit
BPD405	Sports Management	Core	4	0	0	4
BPD406	Anatomy and Physiology	Core	4	0	0	4
BPD411	Educational Technology and Pedagogic Techniques in Physical Education	Compulsory Foundation	2	0	0	2
BPD412	History and Foundations of Physical Education	Elective Foundation	3	0	0	3
BPD409	Practical Orientation in Yoga	Entrepreneurship	0	0	4	2
BPD413	Project Meet (Athletics)	Skill Based	0	0	4	2
BPD410	Internship (06 Week)	Internship	0	0	0	6
BPD414	Health & Wellness Trainer	Value Added Course	2	0	0	2
Discipline Elective-V (Any one of the following)						
BPD415	Environmental Science (EVS)	Discipline Elective-V	3	0	0	3
BPD416	Professional Ethics in Physical Education					
BPD417	Fitness Training and Nutrition					
Total			18	0	8	28
Grand Total			65	0	48	99

***Internship will be after 3rd Semester.**

Evaluation Criteria for Theory Courses

- A. Continuous Assessment: [25 Marks]
 - CA1- Surprise Test (Two best out of three) (10 Marks)
 - CA2- Assignment(s) (10 Marks)
 - CA3- Presentations (5 Marks)
- B. Attendance (5 marks)
- C. Mid Semester Exam: [30 Marks]
- D. End Semester Exam: [40 Marks]

Semester-I**Course Name: Physiology of Exercise****Course Code: BPD111**

L	T	P	Cr
4	0	0	4

Total Hours:60**Learning Outcomes:**

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

1. Analyze and implicate the role of nutrition & its relevance in energy production during sports
2. Summarize the effect of Climatic conditions and sports performance

Course Content**UNIT-I****16 Hours**

Skeletal Muscles and Exercise:

Meaning, Nature, Scope and Importance of Exercise Physiology in Games and Sports, Macro & micro structure of the skeletal muscle
Chemical composition: Sliding filament theory of muscular contraction, Types of muscle fiber Muscle tone.

UNIT-II**15 Hours**

Cardio vascular System and Exercise:

Heart valves and direction of the blood flow: Conduction System of the Heart.

Blood supply to the Heart: Cardiac cycle, stroke volume, cardiac output, heart rate.

Factors affecting heart rate: Cardiac hypertrophy, Effects of exercises and training on the cardio vascular system. Respiratory System and Exercise:

Mechanics of breathing: Respiratory muscles, minute ventilation, ventilation at rest and during exercise

Diffusion of gases: Internal and External respiration, control of ventilation, ventilation and the anaerobic threshold

Second wind, Oxygen debt: Lung volumes and capacities, Effect of exercises and training on the respiratory system.

UNIT-III**14Hours**

Metabolism and Energy Transfer:

Metabolism: ATP, ADP and PC system, anaerobic metabolism, Aerobic and anaerobic systems during rest and exercise, Short duration high intensity Exercises, High intensity exercise lasting

several minutes, long duration exercises.

UNIT-IV 15Hours

Climatic conditions and sports performance and cryogenic aids:
Variation in temperature and Humidity: Thermoregulation, sports performance in hot climate, Cold Climate, high altitude, Influence of Amphetamine, Anabolic steroids, Androstenedione, Beta Blocker, durablin, Choline, Creatine, cocaine, alcohol and Human growth hormone on sports performance.

Narcotic Stimulants: Amphetamines, Caffeine, Ephedrine, Sympathomimetic amines, Stimulants and sports performance

Transaction Mode

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

Suggested Readings

- Kumar, A. and Moses, R. (1995).
- *Introduction to Exercise Physiology Poom pugar Pathipagam, Madras.*
- Beotra, A. (2000). *Drug Education Hand book on Drug Abuse in Sports Authority of India, Delhi.*
- Clarke, D.H. (1975). *Exercise Physiology. Prentice Hall Inc. Englewood Cliffs, New Jersey.*
- Fox, E.L., and Mathews, D. K. (1981). *The Physiological Basis of Physical Education and Athletics. Sanders College Publishing, Philadelphia*
- Guyton, A.C. (1976). *Suggested Readings of Medical Physiology. W. B. Sanders co. Philadelphia*
- Richard, W. Bowers. (1989). *Sports Physiology .Brown Publishers ,WM*

Course Name: Test, Measurement and Evaluation in Physical Education
Course Code: BPD112

L	T	P	Cr
4	0	0	4

Total Hours:60

Learning Outcomes:

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

1. Identify the need & importance of test, measurement and evaluation in physical education
2. Analysis the different motor fitness and physical fitness tests.
3. Performance throw poetic measurements
4. Analyze and interpret the results of tests and measurements used in the field of physical education

Course Content

UNIT-I

14Hours

Introduction to test, measurement and evaluation: Meaning and Definition of test, measurement, evaluation, Principle and Scope of test, measurement and evaluation, Need and Importance of measurement and evaluation in physical education, Approach to measurements.

UNIT-II

16Hours

Motor Fitness Tests: Meaning and definition of motor fitness test, Test for motor fitness: Indiana motor fitness test (for elementary and high school boys, girls and college men), Oregon motor fitness Test (separately or boys and girls), JCR test Motor ability, Barrow motor ability test, New to motor ability Test

Muscular Fitness test: Kraus-Weber minimum muscular fitness test

Physical fitness test: American Alliance for Health, Physical Education, Recreation and Dance(AAHPERD) health related fitness battery (revised in 1984), American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) youth physical fitness test, American College of Sports Medicine (ACSM) health related physical fitness test, Roger's physical fitness Index

Cardio vascular test: Harvard step test, 12 minutes run /walk test, Multi-stage fitness test (Beep test)

UNIT-III

15Hours

Physiological testing: Aerobic capacity: The Bruce treadmill test protocol, 1.5mileruntest for college age males and females

Anaerobic Capacity: Marg aria kalamen test, Wingate anaerobic test Anthropometric measurements: Method of measuring height, standing height, sitting height

Method of measuring Circumference: Arm, waist, hip, high

Method of measuring skin folds: Triceps, sub scapular, supra iliac and pectoral major

UNIT-IV

15Hours

Sports Skills Test:

Basketball: Johnson basketball test, Knox basketball test, Harrison basketball test

Badminton: Lockhart Mc. Person badminton test, French short & long serve test, Hicks badminton test

Hockey: Henry Fridal field hockey test, Schmithal's dribble, dodge, circular tackle & drive, Schmithal's goal shooting, field & drive test

Soccer: Johnson soccer test

Shautele's volleying, passing & recovery test, Shautele's Judgment in passing test Volleyball: Brady's volleying test, French & Cooper's repeated volleying test, French & Cooper's serve 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

- *Authors Guide, (2013). ACSM's Health Related Physical Fitness Assessment Manual. A CSM Publications, USA*
- *Collins, R. D, &HodgesP.B.(2001) A Comprehensive Guide to Sports Skills Tests and Measurement, (2nd edition). Scare crow Press, Lanham.*
- *Cureton, T.K. (1947). Physical Fitness Appraisal and Guidance. The C. Mos by Company, St. Louis.*
- *Getchell, B. (1979). Physical Fitness a Way of Life,2nd Edition. John Wiley and Sons, Inc, New York.*
- *Jenson, ClayneR. and Cyntha, C. Hirst. (1980). Measurement in Physical Education and Athletics Macmillan Publishing Co. Inc, New York.*

Course Name: Communication Skills (CF)**Course Code: BPD113**

L	T	P	Cr
2	0	0	2

Total Hours: 30**Learning Outcomes:**

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

1. Demonstrate oral, written, and visual communication skills
2. Extend and conclude label of human communication and language processes
3. Discover Between Verbal & non-verbal communication techniques in the professional environment
4. Learn the dynamics of social communication

Course Content**UNIT-I****5 Hours**

Communication: An Introduction, Definition, Nature and Scope of Communication, Importance and Purpose of Communication, Process of Communication, Types of Communication

Non-Verbal Communication, Personal Appearance, Gestures, Postures, Facial Expression, Eye Contacts, Body Language (Kinesics), Time language, Silence, Tips for Improving Non-Verbal Communication

UNIT-II**5 Hours**

Effective Communication: Essentials of Effective Communication, Communication Techniques, Barriers to Communication

Communication Network in an Organization: Personal Communication, Internal Operational Communication, External Operational Communication

UNIT-III**10Hours**

Reading Skills: Purpose, Process, Methodologies, Skimming and Scanning, Levels of Reading, Reading Comprehension, Academic Reading Tips

Listening Skills: Purpose of Listening, Listening to Conversation (Formal and Informal),

Active Listening: An Effective Listening Skill, Benefits of Effective Listening, Barriers to Listening, listening to Announcements-

(railway/busstations/airport/sportsannouncement/commentaries etc.), Academic Listening (Listening to Lectures), Listening to Talks and Presentations, Note Taking Tips

UNIT-IV**10Hours**

Oral Communication Skills (Speaking Skills): Importance of Spoken English, Status of Spoken English in India, International Phonetic Alphabet (IPA) Symbols, Spelling and Pronunciation, asking for and giving information, Offering and responding to offers requesting and responding to requests, Congratulating People on their success expressing condolences, asking questions and responding politely, Apologizing and forgiving

Effective Writing Skills: Elements of Effective Writing (What is Writing?), The Sentence, Phrases and Clauses, Types of Sentences, Main Forms of Written Communication, Paragraph Writing (Linkage and Cohesion), Letter Writing (formal and informal), Essay writing, Notices.

Transaction Mode

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

Suggested Readings

- *IanTuhovsky (2015), Communication Skills Training, Create Space Independent Publishing Platform.*
- *James W. Williams (2020), Communication Skills Training, Amazon Digital Services LLC-KDP Print US.*
- *Debra Fine (2014), The Fine Art of Small Talk (2005), Hachette Books.*
- *Thich Nhat Hanh (2014), The art of communicating (2013), Harper Collins Publishers*

Course Name: Sports Technology (Multi-disciplinary)

Course Code: BPD118

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes:

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

1. Identify design of sports equipment and develop skills to optimize and test them.
2. Comprehend the science of sports material and equipment.
3. Recognize modern sports equipment's and gadgets.
4. Use modern techniques and skills achieved in sports

Course Content

UNIT-I

10Hours

Sports Technology: Meaning, definition, purpose, advantages and applications, general principle and purpose of instrumentation in sports, Workflow of instrumentation and business aspects, technological impacts on sports, a review of methods of teaching employed in physical education

Technology in Physical Education and Sports: Initiating technology, Use of Audio and Video technology, Image analysis, Technological devices used in Physical activity and sports, Techniques of presentation and class management skills.

UNIT-II

14Hours

Surfaces of Play fields: Modern surfaces for play fields, construction and installation of sports surfaces

Types of materials: Synthetic, wood, polyurethane, artificial turf, Modern technology in the construction of indoor and outdoor facilities, Technology in manufacture of modern play equipment, Use of computer and software in Match Analysis and Coaching

UNIT-III

09Hours

Modern Equipment

Playing equipment: Balls- Types, materials and advantages
Bat/Stick/Racquets: Types, materials and advantages
Clothing and shoes: Types, materials and advantages
Measuring equipment: Throwing and jumping events
Protective equipment: Types, materials and advantages
Sports equipment with nanotechnology advantages

UNIT-IV**12Hours**

Training Gadgets

Basketball: Ball feeder, mechanism and advantages Cricket: Bowling machine, mechanism and advantages Tennis: Serving machine, mechanism and advantages Volleyball: Serving machine mechanism and advantages

Lighting facilities: Method of erecting flood light and measuring luminous

Video Coverage: Types, size, capacity, place and position of camera in live coverage of sporting 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

- Charles, J.A., Crane, F.A.A. and Furness, J.A.G. (1987). *Selection of Engineering Materials*. Butterworth Heinemann, UK.
- Finn, R.A. and Trojan P.K. (1999). *Engineering Materials and their Applications*. Jaico Publisher, UK
- Mongilo, J. (2001). *Nano Technology 101*. Greenwoodpublishinggroup, New York.
- Walia, J.S. (1999). *Principles and Methods of Education*. Paul Publishers, Jullandhar
- Kochar, S.K. (1982). *Methods and Techniques of Teaching*. Sterling Publishers Pvt. Ltd, New Delhi, Jalandhar.
- Kozman, Cassidy and Jackson. (1952). *Methods in Physical Education*. W. B. Saunders Company, Philately phian and London

Course Name: Value and Environmental Education
(Discipline Elective-I)
Course Code: BPD115

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes:

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

1. Appreciate the significance of moral values in their lives.
2. Understand various concepts related to environmental education.
3. Identify prevalent health issues in both rural and urban areas.
4. Recognize the signs of environmental degradation.

Course Content

UNIT-I

14Hours

Introduction to Value Education: Meaning, definition, concepts of values Value education, Need, importance and objectives

Moral values: Need and theories of values

Classification of values: Basic values of religion, classification of values

Value Systems: Meaning and definition, personal and communal values, consistency, internally consistent, internally inconsistent, Meaning of Environmental Education for Sustainable Development (EESD)

Judging value system, commitment, commitment to values

UNIT-II

12 Hours

Environmental Education: Definition, scope, need and importance of environmental studies, Concept of environmental education, Objective of environmental Education, Celebration of various days in relation with environment, plastic cycling & prohibition of plastic bag /cover, Role of school in environmental conservation and sustainable development pollution free eco-system.

UNIT-III

10Hours

Rural Sanitation and Urban Health: Rural health problems, causes of rural health problems, points to be kept in mind for improvement of rural sanitation, Urban health problems, process of urban health, services of urban area, Suggested education activity, services on urban slum area, Sanitation at fairs & festivals, mass education

UNIT-IV

09Hours

Natural Resources and related environmental issues: Water resources, food resources and land resources, definition, effects

and control, Measures of Air pollution, water pollution, soil pollution, noise pollution, thermal pollution. Management of environment and Govt. Policies, role of pollution control board.

Transaction Mode

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

Suggested Readings

- *Miller T.G.Jr. (1971). Environmental Science. Wadsworth Publishing Co, U.S.A*
- *Rao, M.N.&Datta, A.K. (1987). Waste Water Treatment. Oxford &IBH Publication Copt. Ltd., India.*
- *Heywood, V.H. and Watson V.M., (1995) Global biodiversity Assessment. Cambridge University Press, U.K.*
- *Jadhav, H. and Bhosale, V.M. (1995). Environmental Protection and Laws. Himalaya Pub. House, Delhi.*
- *McKinney, M.L. and Schoel, R.M. (1996). Environmental Science System and Solution. Webenhanced Ed.*

Course Name: Health Education and Sports Nutrition (Discipline Elective-I)
Course Code: BPD116

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes:

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

1. Recognize the key components of sports nutrition and their significance in achieving sports-related objectives.
2. Address health-related concerns in athletes, such as hypertension and stress.
3. Create weight control programs tailored to athletes of different age groups.
4. Formulate effective weight management plans for athletes.

Course Content

UNIT-I

09 Hours

Health Education: Meaning, Scope, Objectives and Spectrum, Principles and Importance of health education, Planning and evaluation in health education programmers

Pollution: Definition, effects and control measures of Air pollution, Water pollution, Noise pollution and Radiation, Natural hazards and their mitigation.

UNIT-II

14 Hours

Health Problems in India: Communicable and non-communicable diseases, obesity, malnutrition, environmental sanitation, explosive, population, Personal and environmental hygiene for schools, objective of school health service, role of health education in schools, Health services care of skin, nails and eye, health appraisal, health record, first aid and emergency care etc.

UNIT-III

10 Hours

Health Hazards, Stress and Injury Management: Hazards of substance abuse: smoking, alcohol & tobacco, Valuable use of leisure time, Emphasis on proper rest, sleep and dreams. Healthy living and positive lifestyle, Wellness of mind, body and soul
 Stress: meaning, causes and management

UNIT-IV

12 Hours

Introduction to Sports Nutrition: Meaning and definition of sports nutrition, role of nutrition in sports, basic nutrition guidelines

Nutrients: Ingestion to energy metabolism (Carbohydrate, Protein and Fat) Role of carbohydrates, Fat and protein during exercise.

Nutrition and Weight Management:

Concept of BMI (Body mass index), obesity and its hazard, dieting versus exercise for weight control maintaining a Healthy Lifestyle

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, Charles A. Administration of Health and Physical Education Programed.*
- *Ghosh, B.N."Treaties of Hygiene and Public Health".*
- *Hanlon, John J. (2003). Principles of Public Health Administration .Turner, C.E.*
- *Nutrition Encyclopedia, edited by Delores C.S. James, The Gale Group, Inc.*
- *Boyd-EatonS.etal. (1989). The Stone Age Health programed: Diet and Exercise as Nature Intended. Angus and Robertson.*
- *Terrassa. (1994). Stress, How Your Diet Can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acid. Thoron's.*

Course Name: Sports Nutrition and Weight Management (OE/ID)
Course Code: OEC029

L	T	P	Cr
2	0	0	2

Total Hours: 30

Learning Outcomes:

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

1. Understand the role of foods and nutrition in sports performance.
2. Comprehend the role of ingestion in energy metabolism.
3. Gain knowledge of nutrition and weight management.
4. Familiarize themselves with the steps involved in planning weight management.

Course Content

UNIT-I

05 Hours

Introduction to Sports Nutrition, Meaning and Definition of Sports Nutrition Basic Nutrition guidelines, Role of nutrition in sports, Factor to consider for developing nutrition plan

UNIT-II

10 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, water balance, Nutrition– daily caloric requirement and expenditure.

UNIT-III

09 Hours

Nutrition and Weight Management:

Meaning of weight management Concept of weight management in modern era Factor affecting weight management and values of weight management:

Concept of BMI (Body mass index), Obesity and its hazard, Myth of Spots education, dieting versus exercise for weight control, Common Myths about Weight Loss, Obesity–Definition, meaning and types of obesity, Health Risks Associated with Obesity, Obesity-Causes and Solutions for Overcoming Obesity

UNIT-IV

06 Hours

Steps of planning of Weight Management:

Nutrition – Daily calorie intake and expenditure, Determination

of desirable bodyweight, Balanced diet for Indian School Children, maintaining a Healthy Lifestyle, Weight management program for sporty child, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss

Transaction Mode

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

Suggested Readings

- *Life style management in Health and Social care*, Merinda The wand Jim McKenna, Black well Publishing United Kingdom
- *Predicting Health behavior*, Mark Connor and Paul Norman, Open University Press, Buckingham, UK
- *Health Behavior and health education: Theory, research and Practice*, Karen Glanz, Barbara Rimer, Viswanath, John Wiley and sons, USA. (Free pdf book)
- *Human Body Composition*, Steven B Heymstead, Timothy Lohan, Zimian Wang, Scott Going, Human Kinetics, USA.
- *Science of Flexibility*, Michael J Alter, Human Kinetics, USA
- *Applied Body Composition Assessment*, Vivian Heyward, Dale Wagner, Human Kinetics, USA.
- *Coping with life stress- the Indian experience*, Mena Hari Haran, Amazon Books
- *Stress Management -a Wellness approach*, Nanette E Tummers, Human Kinetics, USA.
- *Wellness Workbook: How to achieve enduring health and vitality*, John W Travis and Regina SR

Course Name: Track and Field-I (Skill Based)**CourseCode:BPD107**

L	T	P	Cr
0	0	4	2

Total Hours:60**Learning Outcomes:**

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

1. Learn about the starting and finishing techniques of running.
2. Become competent in ground marking for athletic events.
3. Interpret and interpreted rules & regulations of running events.
4. Gain expertise in clearance and landing techniques.

Course Content

Starting, Finishing Techniques of Running events and their rules:

Starting techniques: Standing start, Crouch start and its variations, Proper use of blocks

Finishing Techniques: Run Through; Forward lunging, Shoulder Shrug Ground Marking, Rules and Officiating

Hurdles: Fundamental Skills-Starting, Clearance and Landing Techniques, Types of Hurdles

Relays: Fundamental Skills, Various patterns of Baton Exchange, Understanding of Relay Zones

Ground Marking and Officiating: Ground Marking and Officiating, Interpretation of Rules and Officiating.

Course Name: Games & Sports-I (Skill Based)**CourseCode:BPD108**

L	T	P	Cr
0	0	4	2

Total Hours: 60**Learning Outcomes:**

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

1. Develop fundamental skills to participate in gymnastics, swimming and shooting.
2. Interpret the rules and regulations of gymnastics, swimming and shooting.
3. Identify the dangers and precautions to be followed while performing in the mentioned events.
4. Become competent in maintaining the correct posture and body position while performing in the mentioned events.

Course Content**60Hours**

Gymnastics, Swimming and their skills and rules:

Gymnastics: Floor Exercise: Forward Roll, Backward Roll, Cart wheel, Straddle Role, Dive and Role, Hand Stand and Role, different kinds of scales, Leg Split, Bridge, Dancing steps, Head stand, Jumps-leap, scissors leap.

Vaulting Horse: Approach Run, Take off from the beat board, Cat Vault, Squat Vault.

Swimming: Fundamental Skills: Entry into the pool, developing water balance and confidence, Water fear moving drills, Floating Mushroom and Jelly fish, gliding with and without kickboard
Introduction of various strokes: Body Position, Leg, Kick, Arm pull, Breathing and Coordination, Start and turns of the concerned strokes, Introduction of Various Strokes, Water Treading and Simple Jumping, Starts and turns of concerned strokes

Rules of Competitive swimming, officials and their duties, pool specifications, seeding heats and finals, Rules of the races

Shooting and its skills and rules:

Shooting Fundamental Skills: Basic stance, grip, Hold in grille/Pistol, aiming target, Safety issues related to rifle shooting, Rules and their interpretations and duties of officials

Course Name: Drill and Marching(Entrepreneurship)**CourseCode:BPD109**

L	T	P	Cr
0	0	4	2

TotalHours:60**Learning Outcomes:**

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

1. Develop fundamentals skills to participate in various demonstrative activities.
2. Gain expertise in coordinating movements with fellow peers while performing.
3. Acquire the skill of teaching these activities on certain rhythm and/or beats.
4. Modify and innovate new techniques to enhance the poise of the performance.

Course Content**60 Hours**

Introduction to Marching, Light Apparatus and their exercises: Marching Command, Drill and Marching, Mass P.T. Exercises-Two count, four count and eight count exercises, Dumbbells/Wands/Hoop/Umbrella/

Tipri: Fundamentals skills Apparatus/Light apparatus Grip. Attention with apparatus/Light apparatus, stand-at-ease with apparatus/light apparatus Exercise with verbal command, drum, whistle and music: Two counts, four counts, eight counts and sixteen counts Standing Exercise, Jumping Exercise, Moving Exercise.

Semester-II

Course Name: Sports Biomechanics and Kinesiology
Course Code: BPD211

L	T	P	Cr
4	0	0	4

Total Hours: 60

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 role of Biomechanics in exercise and games

Course Content**UNIT-I****15Hours**

Introduction: Meaning, nature, role and scope of applied kinesiology and Sports Biomechanics, Meaning and types of axis and planes, body movement sin axis and planes, Branches of mechanics i.e. kinematics, kinetics, Statics, Centre of gravity, Line of gravity, Vectors and Scalars.

UNIT-II**15Hours**

Muscle Action: Structural classification of muscles characteristics of muscle tissue, muscles fiber types, Reciprocal innovational 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, Pectorals major and minor, deltoid, biceps, triceps (Anterior and Posterior)

UNIT-III**14Hours**

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 counterforce

Force: Meaning and definition of force, sources of force, force components Force applied at an angle pressure, Centripetal force centric fugal force Friction: Buoyancy, Spin

UNIT-IV**16Hours**

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, aerodynamics

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 Hall Inc., New Jersey.
- Thomas. (2001). *Manual of structural Kinesiology*. Mc Graw Hill, New York.
- Uppal, A.K. & Lawrence, Mamta. (2004). *MP 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, Philadelphi

Course Name: Sports Psychology
CourseCode:BPD212s

L	T	P	Cr
4	0	0	4

Total Hours: 60

Learning Outcomes:

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

1. Grasp the meaning, nature and scope of sports Psychology.
2. Prepare psychological profiles of sportspersons.
3. Conduct various psychological tests on players.
4. Gain knowledge about various psychological problems faced by sports persons and their coping techniques.

Course Content

UNIT-I

15Hours

Sports Psychology and Sensory Perceptual Process: Meaning and scope of sport psychology, Importance of sport psychology, Divisions of sport psychology Sensory Perceptual Process: Meaning, mechanism and stages of sensory perceptual process Classification of senses and sensory perceptual process, Factors in perception Implication of sensory-perceptual process in exercise and Sport.

UNIT-II

14Hours

Motivation: Meaning and definition, types of motivation: Intrinsic, extrinsic Achievement motivation: Meaning, measuring of achievement motivation Anxiety: Meaning and definition, nature, causes method of measuring anxiety, Competitive anxiety and sports performance Stress: Meaning and definition, causes of stress, Stress and sports performance Aggression: Meaning and definition, method of measurement Aggression and sports performance Self-concept: Meaning and definition, method of measurement.

UNIT-III

16 Hours

Goal Setting: Meaning and definition, process of goal setting in physical education and sports Relaxation: Meaning and definition, types and methods of psychological relaxation Psychological tests: Types of psychological Test-Instrument based tests (Pass along test, Tachistoscope, Reaction timer, Finger dexterity board, Depth perception box, Kinesthesia meter board)

Questionnaire: Sports achievement motivation, sports competition anxiety

UNIT-IV 15Hours

Group Cohesion: Definition and meaning, group size, group composition, group cohesion, group interaction, group dynamics, Current problems in sports and future directions, sports social crisis management

Women in sports: Sports women in our society, participation pattern among women, gender in equalities in sports

Practical: the students in laboratory should conduct at least five experiments related to the topics listed in the UNITs above. (Internal assessment)

Transaction Mode

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

Suggested Readings:

- *Authors Guide (2013). National Library of Educational and Psychological Test (NLEPT) Catalogue of Tests. National Council of Educational Research and Training Publication, New Delhi.*
- *Jain. (2002). Sports Sociology. Heal Sahety Kendre Publishers.*
- *Jay Coakley. (2001). SportsinSociety–IssuesandControversiesinInternationalEducation.Mc-CrawSeventhEd*
- *John D Lauther (2000). Psychology of Coaching. Prentice HallInc. New Jersey.*
- *Mir's law Vauks & Bryant Cratty(1999). Psychology and the Superior Athlete. The Macmillan, London.*

Course Name: Leadership Skills (VAC)**CourseCode:BPD210**

L	T	P	Cr
2	0	0	2

Total Hours: 30**Learning Outcomes:**

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

1. Develop essential leadership skills required to tackle complex sports issues.
2. Understand the framework, roles and functions of leaders in effective organizations.
3. Interpret the responsibilities of a sports leader.
4. Enhance their ability to address sports-related challenges and assume leadership roles effectively.

Course Contents**UNIT-I****05Hours**

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**10Hours**

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**10Hours**

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 organizational performance

UNIT-IV**05Hours**

Decision Making: Introduction of Decision Making Sports, Types of managerial decisions, Models of decision-making, Fair Playing 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: Applied Statistics in Physical Education(Discipline Elective-II)
CourseCode:BPD215

L	T	P	Cr
3	0	0	3

TotalHours:45

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. Actuate various statistical tests to research work in the field of physical education.
4. Analyze the Statistical data in the field of physical education and sports.

Course Content

UNIT-I

12Hours

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

14Hours

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

09Hours

Probability Distributions and Graphs:

Normal curve: Meaning of probability, principles of normal curve and properties of normal curve

Divergence form normality: Sleekness and Kurtosis

Graphical representation in Statistics: Line diagram, bar diagram, Histogram, Frequency Polygon

UNIT-IV**10Hours**

Inferential and Comparative Statistics:

Tests of significance: Independent “t” test, dependent’s” 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, I edition. Prentice Hall, Inc., Eagle wood Cliffs.*
- *Jerry, R Thomas. & Jack, K Nelson. (2000). Research Methods in Physical Activities Human Kinetics, Illinois’s.*
- *Kamlesh, M.L. (1999). Research Methodology in Physical Education and Sports. KSK Publishers, New Delhi.*
- *Rothstein, 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.*
- *Thirumalaisamy,(1998).Statistics in Physical Education .Senthil Kumar Publications, Karaikudi*

Course Name: Education Technology in Physical Education (Discipline Elective-II)
CourseCode:BPD216

L	T	P	Cr
3	0	0	3

TotalHours:45

Learning Outcomes:

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

1. Gain expertise in application of pioneering technologies to enhance teaching in physical education.
2. Inculcate use of audio-visual media for the purpose of teaching and training in physical education.
3. Identify recent innovations in the area of education technology related to physical education.
4. Use of technology in the field of physical education.

Course Content

UNIT-I

07Hours

Education Technology:

Educational technology: Need, Nature and Scope, Effective teaching and Principles of teaching, Teacher's responsibilities, Phases and levels of teaching, a review of methods of teaching employed in physical education

UNIT-II

14Hours

Systems Approach to Physical Education and Communication:

Systems approach to education and its Components: Goal setting, task analysis, content analysis

Context analysis and evaluation strategies: Instructional strategies and media for Instruction, Effectiveness of communication in instructional system, Communication modes, barriers and process of communication

Instructional design: Concept, views, Process and stages of development of instructional design

Overview of models of instructional design: Instructional design for competency based teaching, models for development of self-learning material

UNIT-III

12Hours

Audio Visual Median Physical Education: Audio-visual media meaning, importance and various forms Audio/Radio: Broadcast and audio recordings, strengths and limitations, criteria for selection of instructional UNITS, script writing, pre-

production, post-production process and practices, audio conferencing and inter active radio conference
 Video/Educational television: Telecast and video recordings strengths and limitations, video conferencing, SITE experiment, country-wide classroom project and satellite based instructions, Use of animation films for the development of Children's imagination.

UNIT-IV

12Hours

New Horizons of Educational Technology:

Recent innovations in the area of ET interactive video: Hypertext, video texts, optical fiber technology, laser disk, computer conferencing etc, Procedure and organization of Teleconferencing/interactive video-experiences of institutions, schools and universities, Recent experiments in the third world countries and pointers for, India with Suggested Readings to Physical education, Recent trends of research in educational technology and its future with Suggested Readings to 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

- Amita Bhardwaj. (2003). *New Media of Educational Planning*, Sarup of Sons, New Delhi
- Bhatia and Bhatia (1959). *The Principles and Methods of Teaching*. Doaba House, New Delhi.
- Essentials of Educational Technology, MadanLal, Anmol Publications
- Sam path, A. Pannirselvam and S. Santana. (1981). *Introduction to Educational Technology*. Sterling Publishers Pvt. Ltd. New Delhi
- Kochar, S.K. (1982). *Methods and Techniques of Teaching.*, Sterling Publishers Pvt. Ltd., New Delhi, Jalandhar.
- Komen, Cassidy and Jackson. (1952). *Methods in Physical Education*. W.B. Saunders Company, Philadelphia and London

Course Name: Track and Field-II(Skill Based)**CourseCode:BPD207**

L	T	P	Cr
0	0	4	2

Total Hours: 60**Learning Outcomes:**

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

1. Develop fundamental skills of jumping in Sports & Games.
2. Demonstrate appropriate take-off and landing techniques.
3. Interpret the rules and regulations of jumping events.
4. Perform officiating duties during jumping events.

Course Content**30Hours**

Fundamental's skill of Straddle Roll, rules, officiating of High Jump, Triple jump and long jump:

High Jump (Straddle Roll): Approach Run, Take off, Clearance over the bar, landing.

Course Name: Games and Sports-II (Skill Based)**CourseCode:BPD208**

L	T	P	Cr
0	0	4	2

TotalHours:60**Learning Outcomes:**

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

1. Develop skills to analyze and interpret the rules of the Indoor sports(Racket).
2. Gain expertise in fundamental skills and techniques of racket games.
3. Perform officiating duties during a Racket sports event.
4. Learn the defensive techniques of racquet games.

Course Content**60 Hours**

Fundamental skills, rules, officiating and duties of officials of Badminton and Table Tennis,

Badminton:

Fundamental Skills: Racket parts, Racket grips, Shuttle Grips, the basic stances The basic strokes: Serves, Forehand, overhead and under arm, Backhand-overhead and underarm, Drills and lead up games, Types of Games-Singles, doubles, including mixed doubles, Rules and their interpretations and duties of officials.

Table Tennis: Fundamental Skills: The Grip-The Tennis Grip, Pen Holder Grip, Service-Fore hand, Backhand, Side Spin, High Toss, Strokes-Push, Chop, Drive, Half Volley, Smash, Drop-shot, Balloon, Flick Shot, Loop Drive

Stance and Ready position and footwork, Rules and their interpretations and duties of officials.

Fundamental skills, rules, officiating and duties of officials of Squash and Tennis Squash: Fundamental Skills: Service-Underhand and Overhand, Service Reception, Shot-Down the line, Cross Court, Drop, Half Volley

Tactics: Defensive, attacking in game, Rules and their interpretations and duties of officials

Tennis: Fundamental Skills: Grips-Eastern Forehand grip and Backhand grip, Western grip, Continental grip, Chopper grip, Stance and Footwork, Basic Groundstrokes-Forehand drive, Back hand drive, Basic service, Basic Volley ,Over-head Volley, Chop, Tactics –Defensive, attacking in game, Rules and their interpretations and duties of officials

Course Name: Gymnastic (Entrepreneurship)**CourseCode:BPD213**

L	T	P	Cr
0	0	4	2

Total Hours:30**Learning Outcomes:**

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

1. Learn the rules of gymnastics.
2. Develop skills in athletic events and gymnastics.
3. Acknowledge the basic and advanced techniques of the game.
4. Demonstrate officiating signals of the game.

Course Content**30 Hours**

Floor gymnastic for Boys and Girls

Exercise: Forward Roll, Backward Roll, Cart wheel, Straddle Role, Dive and Role, Hand Stand and Role, different kinds of scales, Leg Split, Bridge, Dancing steps, Head stand, Jumps-leap, scissors leap.

Parallel bar for Boys Balancing Beam for Girl.

Course Name: Teaching Practice-I (Skill Based)**CourseCode:BPD217**

L	T	P	Cr
0	0	4	2

Total Hours: 60**Learning Outcomes:**

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

1. Contrast the fundamentals of teaching practice.
2. Prepare and maintain records in the school
3. Exhibit the assessment work done in the school
4. Participate Inco curricular and extracurricular activities organized in the schools.

Course Content**60 Hours**

10 teaching practice lessons (General Lesson) in institution.

Project: (Non-Credit) Preparation and presentation of annual report, conduct of annual athletics meet/Intramural, play days, camping.

Semester-III**Course Name: Scientific Principles of Sports Training****CourseCode:BPD314**

L	T	P	Cr
4	0	0	4

TotalHours:60**Learning Outcomes:**

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

1. Undertake training and coaching assignments in the field of physical education
2. Recognize the areas of recent development in sports and inculcate them in the training process
3. Develop skills to plan training programs as per the need of an athlete
4. Development of physical training techniques

Course Content**UNIT-I****14Hours**

Introduction: Sports training Definition, aim, characteristics, principles of sports training

Overload: Definition causes of overload, symptoms of over load and effects of overload on sports performance

Remedial measures: Super compensation, altitude training, cross training

UNIT-II**15Hours**

Methods of Training: Methods of Training: Importance, Principles

Types of Training-Weight training, Circuit training, Interval training, Fartlek training, Cross-Country and Polymeric training

Training means and methods: Types, Classification of Physical Exercise, Basic Methods of Conditioning

Muscular Adaptations to Aerobic and Anaerobic training: Fiber Composition, Oxygen Delivery, Energy Production

UNIT-III**15Hours**

Flexibility: Methods to improve the flexibility stretch and hold method, ballistic method, Proprioceptive neuromuscular facilitation (PNF)

Specials type Training: Polymeric training, Training for coordinative abilities, methods to improve coordinative abilities, Sensory method, variation in movement execution method, Variation in external condition method, combination of movement method, types of stretching exercises.

UNITIV**16Hours**

Training Plan: Macro cycle, mesocycle, micro cycle, Short-term plan and long term plan, meaning, single, double and multiple periodization's, preparatory period, competition period and transition period

Doping: Definition of doping, side effects of drugs, dietary supplements, IOC list of doping classes and methods

Blood doping: The use of erythropoietin in blood boosting, blood doping control, the testing program, problems in drug detection, Blood testing in doping control problems with the supply of medicines Course to IOC regulations, Over-the-counter drugs(OTC), prescription only medicines(POMs), Controlled drugs(CDs). Reporting test results, 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

- Beotra, Alka. (2000). *Drug Education Handbook on Drug Abuse in Sports*. Sports Authority of India, Delhi.
- Bunn, J.N. (1998). *Scientific Principles of Coaching*. Prentice Hall Inc., Engle Wood Cliffs, New Jersey.
- Cart, E. Klafs & Daniel, D. Arnheim (1999). *Modern Principles of Athletic Training*. C.V. Mosby Company, St. Louis.
- Daniel, D. Arnheim (1991). *Principles of Athletic Training*. Mosby Year Book, St. Louis.
- David, Mottram (1996). *Drugs in Sport*. School of Pharmacy, John Moore University, Liverpool
- Gary, T. Moran (1997). *Cross Training for Sports*. Human Kinetics, Canada.

Course Name: Sports Medicine**CourseCode:BPD315**

L	T	P	Cr
4	0	0	4

TotalHours:60**Learning Outcomes:**

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

1. Provide first aid treatment and rehabilitation programs for sports injuries.
2. Gain knowledge about sports injuries affecting different parts of body.
3. Develop skills to use the sports techniques flawlessly to minimize injuries.
4. Development and knowledge of sports Medicine

Course Content**UNIT-I****16Hours**

Introduction: Meaning, definition and importance of sports medicine, Definition and principles of the repetitive exercises, coordination exercise, Balance training exercise, strengthening exercise, mobilization exercise, gait training, gym ball exercise

Injuries: acute, sub-acute, chronic, Advantages and disadvantages of PRICE, PRINCE therapy, aquatic therapy

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

Proprioceptive neuromuscular muscular 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-II**14Hours**

Age and Gender Consideration in Sports: Biological, chronological age and age determination, Suitability of sports at various stages of growth, Special problems women and sports performance, Exercise benefits at various stages of life, Physical, physiological, bio-chemical and bio-mechanical difference between men & women

UNIT-III**15Hours**

Upper Extremity Injuries and Exercise:

Upper limb and thorax injuries: Shoulder-sprain, strain, dislocation, and strapping, Elbow-sprain, strain, strapping, Wrist and Fingers-sprain strain,

Strapping, Thorax and Rib fracture, breathing exercises, relaxation techniques, Freeh and 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

15Hours

Lower Extremity Injuries and Exercise:

Lower limb and abdomen injuries: Hip- adductor strain, dislocation, strapping, Knee- sprain, strain, strain, strapping, Ankle- sprain, train, strapping, Abdomen- Abdominal wall, contusion, abdominal muscle strain

Free exercises, Stretching and strengthening, Exercise for Hip, knee, ankle and Foot, Supporting and aiding techniques and equipment for lower limb and abdomen injures

Practical lab:

Practical and visit to physiotherapy center to observe treatment procedure of sports injuries; data collection of sports injury incidences, visit to TV center etc. should be planned internally.

Transaction Mode

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

Suggested Readings

- Norris, C. M. (1993). *Sports Injuries: Diagnosis and Management for Physiotherapists*. Thomson Litho Ltd., East Kilbride.
- Gould, J. A., & Davies, G. J. (1985). *Physical Therapy*. C.V. Mosby Company, Toronto.
- Million, B. M. (1984). *Sports Injuries and Athletic Problems*. Surjeet Publication, New Delhi.
- Pande. (1998). *Sports Medicine*. Khel Sahitya Kendra, New Delhi.
- *The Encyclopedia of Sports Medicine*. (1998).

Course Name: Yogic Science (ACE)**CourseCode:BPD323**

L	T	P	Cr
2	0	0	2

Total Hours: 30**Learning Outcomes:**

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

1. Articulate various concepts of yogic practice in their own words.
2. Demonstrate yoga asanas (poses) and elucidate their benefits.
3. Engage in teaching practice and conduct research in the field of yoga.
4. Explain the fundamentals and advantages of Yoga using their own words.

Course Content**UNIT-I****07Hours**

Introduction to Yoga: Meaning, Definition, types, aims and objectives of yoga Importance of yoga in education & other fields of life, Historical development of yoga from ancient to modern times
Meaning and definition of astanga yoga: Yam, niyama, asana, pranayama, prathyahara, dharana, dhyana, Samadhi

UNIT-II**09Hours**

Nadis, Asanas and Pranayama:

Loosen in exercise: Techniques and benefits.

Asanas & Pranayama: Types, techniques and benefits, surya namaskar, Methods and benefits Nadis: Meaning, methods and benefits,

Asana: types of asana, preparation & technique of different asana and their effects on the body

UNIT-III**07Hours**

Kriyas

Shat Kriyas: Meaning, techniques and benefits of neti, dharti, kapalapati, trataka, nauli, basti

Bandhas: Meaning, techniques and benefits of jalendra bandha, jihvabandha, uddiyanabandha, mulabandha

Mudras

Meaning, techniques and benefits of hastamudras, asamyuktahastam, samyuktahastam, mana mudra, kaya mudra, banda mudra, adhara mudra Meditation: Meaning, Techniques and benefits of meditation, Passive and active meditation, saguna meditation and nirguna meditation

UNIT-IV

07 Hours

Yoga and Sports Yoga

Supplemental exercise: Yoga compensation exercise, yoga regeneration exercise, Power Yoga, role of Yoga in Psychological Preparation of athlete: Mental wellbeing, anxiety, depression concentration, self-actualization

Effect of yoga on physiological system: Circulatory, skeletal, digestive, nervous, respiratory, excretory System

Transaction Mode

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

Suggested Readings

- Feuerstein, G. (1975). *Suggested Readings of Yoga*. Motilal Banarsidass Publishers Pvt. Ltd., London.
- Gore, M. M. (1990). *Anatomy and Physiology of Yogic Practices*. Kanchan Prakashan, Lonavla.
- Purperhart, H. (2004). *The Yoga Adventure for Children*. Hunter House, Netherlands.
- Iyengar, B. K. S. (2000). *Light on Yoga*. HarperCollins Publishers, New Delhi.
- Karbelkar, N. V. (1993). *Patanjal Yogasutra Bhashya (Marathi Edition)*. Hanuman Vyayam Prasarak Mandal.

Course Name: Olympic Movement
(Discipline Elective-III)
Course Code: BPD319

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes:

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

1. Acknowledge basic Memorize of Olympic movement
2. Identify Significance of Olympic Ideals, Olympic Rings, Olympic Flag
3. Memorize about different Olympic games
4. Study about IOC, IOA

Course Content

UNIT-I

09 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

10 Hours

Modern Olympic Games:

Significance of Olympic Ideals, Olympic Rings, Olympic Flag, Olympic Protocol for member countries, Olympic motto, Olympic Code of Ethics, Olympism, Inaction, Sports for All

UNIT-III

14 Hours

Different Olympic Games:

Para Olympic Games, Summer Olympics, Winter Olympics, Youth Olympic Games.

UNIT-IV

12 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 Nonfiction Companion to Magic Tree House: Hour of the Olympics*. Random House Books for Young Readers, New York.
- Burbank, J. M., Andranovich, G. D., & Heying, C. H. (2001). *Olympic Dreams: The Impact of Mega-Events on Local Politics*. Lynne Rienner Publishers.

Course Name: Sports Engineering (Discipline Elective-III)
Course Code: BPD320

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes:

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

1. Interpret the mechanics of engineering materials.
2. Identify sports dynamics and utilize them to enhance performance
3. Develop skills for designing and maintenance of sports infrastructure.
4. Use of technology in the field of physical education

Course Content

UNIT-I

14 Hours

Introduction to sports engineering and Technology:

Meaning of sports engineering, human motion, Detection and recording, human performance, assessment, Equipment and facility designing and sports related instrumentation and measurement

Mechanics of engineering materials:

Concepts of internal force, axial force, shear force, bending movement, torsion, energy method to find displacement of structure, strain energy

Biomechanics of daily and common activities, Gait, Posture, and Body levers, ergonomics, Mechanical principles in movements such as lifting, walking, running, throwing, jumping, pulling and pushing etc.

UNIT-II

08 Hours

Sports Dynamics:

Introduction to dynamics, kinematics to particles, rectilinear and plane curvilinear motion coordinate system, Kinetics of particles, Newton's laws of motion, work, energy, Impulse and momentum

UNIT-III

13 Hours

Infrastructural Development:

Sports infrastructure, gymnasium, pavilion, swimming pool, indoor stadium, out-door stadium, play park, academic block, administrative block, research block, library, sports hostels, etc.

Requirements: Air ventilation, daylight, lighting arrangement, galleries, store rooms, office, toilet blocks (M/F), drinking water, sewage and waste water disposal system, changing Rooms(M/F), Sound system(echo-free), internal arrangement according need

and nature of activity to be performed, corridors and Gates for free movement of people

UNIT-IV

10Hours

Maintenance and Facility life cycle costing:

Basics of the theoretical analysis of cost, total life cost concepts, maintenance costs, energy cost, capital cost and taxation, Emergency provisions of, lighting, fire and exits, Eco-friendly outer surrounding, Maintenance staff, financial consideration Building process: Design phase (including brief documentation), construction phase functional (occupational) life, re-evaluation, Refurnish, demolish, Maintenance policy, preventive maintenance, corrective maintenance, record and register for maintenance

Transaction Mode

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

Suggested Readings

- Franz, K. F., et al. (2013). *Routledge Handbook of Sports Technology and Engineering*. Routledge.
- Hake, S. (1996). *The Engineering of Sport*. CRC Press.
- Hong, Y. (2013). *Routledge Handbook of Ergonomics in Sport and Exercise*. Routledge.
- Jenkins, M. (2003). *Materials in Sports Equipment, Volume I*. Elsevier.

Course Name: Physical Fitness and Wellness (Discipline Elective-III)
Course Code: BPD321

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes:

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

1. Relate fitness and wellness management techniques.
2. Pursue and orient students towards achieving a healthy and positive lifestyle.
3. Develop competency for profile development, exercise guidelines adherence.
4. Physiological effect of human movement

Course Content

UNIT-I

14Hours

Introduction:

Meaning and definition of physical fitness, physical fitness concepts and techniques, Principles of physical fitness, physiological principles involved in human movement, Components of Physical Fitness, Leisure time physical activity and identify opportunities in the community to participate in this activity, Current trends in fitness and conditioning, components of total health fitness and the relationship between physical activity and lifelong wellness

UNIT-II

10Hours

Aerobic Exercise:

Cardio respiratory endurance training: Proper movement forms, i.e., correct stride, arm movements

Body alignment: Proper warm-up, cool down and stretching, monitoring heart rates during activity, Assessment of cardio respiratory fitness and set goals to maintain or improve fitness levels, Cardio respiratory activities including i.e. power walking, pacer test, interval training, incline running, distance running, aerobics and circuits.

UNIT-III

12Hours

Anaerobic Exercise:

Resistance training for muscular strength and endurance, principles of resistance training, Safety techniques (spotting, proper body alignment, lifting techniques, spatial, awareness and proper breathing techniques)

Weight training principles and concepts, basic resistance

exercises (including free hand exercise, free weight exercise, weight machines, exercise and tubing, Medicine balls, fit balls) advanced techniques of weight training.

UNIT-IV

09Hours

Flexibility Exercise:

Flexibility training, relaxation techniques and core training, Safety techniques (stretching protocol; breathing and relaxation techniques) types of flexibility exercises (i.e. dynamic, static), Develop basic competency in relaxation and breathing techniques Pilates, Yoga

Transaction Mode

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

Suggested Readings

- Miller, D. K., & Allen, T. E. (1989). *Fitness: A Lifetime Commitment*. Surjeet Publication, Delhi.
- Difcore, J. (1998). *The Complete Guide to Postnatal Fitness*. A&C Black Publishers Ltd., London.
- Uppal, A. K. (1990). *Physical Fitness*. Friends Publications, India.
- Elizabeth, & Keday. (1986). *Sports Fitness for Women*. B.T. Batsford Ltd., London.
- Foster, E. R., Hartiger, K., & Smith, K. A. (2002). *Fitness Fun*. Human Kinetics Publishers.
- Lawrence, D. (1999). *Exercise to Music*. A&C Black Publishers Ltd., London

Course Name: Adapted Physical Education (Discipline Elective-IV)

Course Code: BPD324

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes:

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

1. The Examine would enable the students to understand the activity requirements of various levels of physically challenged persons.
2. The Examine would thus enable the students to prepare and organize worthwhile activity programs for various levels of physically challenged persons.
3. Summarize the Para sports and other Opportunities
4. Students will learn about Role of games and sports in Adapted Physical Education

Course Content

UNIT- I

10 Hours

Introduction: Meaning, Definition and Importance of Adapted Physical Education and Sports, Purpose, Aims and Objectives of Adapted Physical Education and Sports, Program organization of Adapted Physical Education and Sports, Organizations addressing and giving opportunities to people with disabilities, Adapted Sports-Para Olympics and other Opportunities.

UNIT- II

09 Hours

Development of Individual Education Program (IEP), the student with a disability, Components and Development of IEP, Principles of Adapted Physical Education and Sports, Role of Physical Education teacher

UNIT- III

12 Hours

Developmental Considerations of an Individual, Motor development, Perceptual Motor development, Early childhood and Adapted Physical Education, teaching style, method and approach in teaching Adapted Physical Education

UNIT- IV

14 Hours

Individual with unique need and activities, Behavioral and Special learning disability, Visual Impaired and Deafness, Health Impaired students and Physical Education, Health Related Physical Fitness

(HRPF) and its development for Individual with unique need, Role of games and sports in Adapted 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

- Beverly, N. (1986). *Moving and Learning*. Times Mirror/Mosby College Publishing.
- Cratty, B. J. (n.d.). *Adapted Physical Education in the Mainstream* (4th ed.). Love Publishing Company.
- Houner, L. D. *Integrated Physical Education: A Guide for the Elementary Classroom Teacher*.
- Winnick, J. P. (2005). *Adapted Physical Education and Sport* (4th ed.). Human Kinetics.
- Pangrazi, R. P., & Dauer, V. P. *Dynamics of Physical Education*.

Course Name: Fitness Centre Management (Discipline Elective-IV)

Course Code: BPD325

L	T	P	Cr
3	0	0	3

Total Hours: 45

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 through the value added course.
3. Summarize the basic concept of Management.
4. Comprehend the basic Fitness Management.

Course Content

UNIT- I

09 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

10 Hours

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

UNIT- III

12 Hours

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

UNIT- IV

14 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). *Advanced Studies in Physical Education and Sports*. U.K.: Thomas Nelson and Sons Ltd.
- Bucher, C. A. (2002). *Management of Physical Education and Sports* (12th ed.). USA: McGraw Hill Co.
- Chakraborti, S. (2007). *Sports Management*. New Delhi: Friends Publication.
- Frosdick, S., & Walley, L. (2003). *Sports and Safety Management*. USA: A division of Reed Education and Professional Publishing Ltd.

Course Name: Sports Sociology (Discipline Elective-IV)
Course Code: BPD326

L	T	P	Cr
3	0	0	3

Total Hours: 45

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

14 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

13 Hours

Socialization through sports: Sports and integration

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

UNIT III

10 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

08 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 Reading'

- C.A. Bucher, *Foundations of Physical Education and Sports*
- Dharam Vir (Editor), *Sports and Society – Readings in Sociology of Sports*
- Jay, J. Coakley, *Sports in Society – Issue and Controversies*

Course Name: Track and Field-III (Skill Based)**CourseCode:BPD311**

L	T	P	Cr
0	0	4	2

Total Hours: 60**Learning Outcomes:**

1. After completion of this course the learner will be able to:
2. Develop skills to participate and perform in throwing events.
3. Gain competency in Ground Marking/Sector Marking for the events.
4. Undertake officiating duties during throwing events.
5. Interpret the signals used by referee during a throwing event.

Course Content

Fundamental skills, rules, officiating and ground layout of Throwing Events: Discus Throw, Javelin, Hammer throw, Shot-put Basic Skills and techniques of the Throwing events: Grip, Stance, Release, Follow through/ (Follow through action)

Ground marking/Sector Marking Interpretation of Rules and duties of officials.

Course Name: Games Specialization(Skill Based)
CourseCode:BPD316

L	T	P	Cr
0	0	4	2

Total Hours: 60

Learning Outcomes:

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

1. Exhibit and assess the techniques of any team game of choice.
2. Interpret and follow the rules of these games.
3. Officiate these games with skill.
4. Display the advanced Techniques of these games.

Course Content

Fundamental Skills of any two combative games from the List-
 Karate, Judo, Fencing, Boxing, Taekwondo, Wrestling, Wushu

Course Name: Teaching Practices-II(Entrepreneurship)
ssCourseCode:BPD317

L	T	P	Cr
0	0	4	2

Total Hours: 60

Learning Outcomes:

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

1. Undertake training and coaching assignment
2. Prepare and maintain records in the school.
3. Perform assessment of the work done in school
4. Teach the specific game and can rectify mistakes.

Course Content

The students of B.P.Ed–III Semester need to develop proficiency in taking teaching classes in indigenous activities and sport under school situation. In view of this, the students shall be provided with teaching experience. The duration of the lesson to be conducted by the students shall be in the range of 30 to 40 minutes depending on the class they are going to handle at school and college level. Each student teacher is expected to take at least five lessons during the course of the second semester. The lessons will be overseen by faculty members and subject matter experts. These supervisors will evaluate the merits and demerits of each lesson, providing constructive feedback and guidance for future improvements. The duration of these lessons should gradually increase, ensuring that all components of the lesson are progressively covered, allowing for a comprehensive and structured learning experience

Semester-IV**Course Name: Sports Management****CourseCode:BPD405**

L	T	P	Cr
4	0	0	4

Total Hours: 60**Learning Outcomes:**

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

1. Paraphrased the concept of sports management.
2. Manage events of physical education and sports
3. Develop skills in management and budget making during sports events.
4. Development and knowledge of various sports Events

Course Content**UNIT-I****15Hours**

Management in Physical Education and Sports: Concept, Meaning, 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**15Hours**

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**14Hours**

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.

UNITIV**16Hours**

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

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

Course Name: Anatomy and Physiology**Course Code: BPD406**

L	T	P	Cr
4	0	0	4

Total Hours: 60**Learning Outcomes:**

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

1. Learn about the structural organization of the human body and its functioning.
2. Comprehend the regulatory mechanism of every organ system.
3. Become competent to plan work out regime based on an individual's physiology.
4. Gain knowledge about the effect of physical work out on different systems of the human body.

Course Content**UNIT-I****14 Hours**

Introduction to Anatomy and Physiology:

Brief Introduction of Anatomy and physiology in the field of Physical Education, Introduction of Cell and Tissue, The arrangement of the skeleton, Function of the skeleton, Ribs and Vertebral Column and the extremities, Joints of the body and their types, Elementary concept of ligament and tendon, Gender differences in the skeleton, Types of muscles

UNIT-II**17 Hours**

Systems of Human Body:

Blood and circulatory system: Constituents of blood and their function, Blood groups and blood transfusion, clotting of blood, the structure of the heart-properties of the heart muscle, circulation of blood, cardiac cycle, blood pressure, Lymph and Lymphatic circulation, Cardiac output

The Respiratory system: The Respiratory passage, the lungs and their structure and exchange of gases in the lungs, mechanism of respiration (internal and external respiration) lung capacity, tidal volume

The Digestive system: structure and functions of the digestive system, Digestive organs, Metabolism

The Excretory system: Structure and functions of the kidneys and the skin

The Endocrine glands: Functions of glands pituitary, Thyroid,

Parathyroid, Adrenal, Pancreatic and the sex glands
Nervous systems: Function of the Autonomic nervous system and Central nervous system, Reflex Action
Sense organs: A brief account of the structure and functions of the Eye and Ear

UNIT-III

14Hours

Physiology of Human Systems: Definition of physiology and its importance in the field of physical education and sports, Structure, Composition, Properties and functions of skeletal muscles Nerve control of muscular activity, Neuron-muscular junction, Transmission of nerve impulse, Fuel for muscular activity, Role of oxygen-physical training, oxygen debt, second wind, vital capacity

UNIT-IV

13Hours

Physiological concept of physical fitness, warming up, conditioning and fatigue, Basic concept of balanced diet, Diet before, during and after competition

Transaction Mode

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

Suggested Readings

- Gupta, M., & Gupta, M. C. (1980). *Body and Anatomical Science*.
- Guyton, A. C. (1996). *Textbook of Medical Physiology* (9th ed.). Philadelphia.
- Moorthy, A. M. (2014). *Anatomy, Physiology, and Health Education*. Karaikudi: Madalayam Publications, Morehouse.

Course Name: Educational Technology and Pedagogic Techniques in Physical Education (CF)

Course Code: BPD411

L	T	P	Cr
2	0	0	2

Total Hours: 30

Learning Outcomes:

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

- 1.To Paraphrase teaching as a process and apply the knowledge of methods and techniques of teaching.
- 2.To develop lesson, plan for different activities and population
- 3.To be acquainted with the developmental aspects of motor and skill development.
- 4.To familiarize with the use of ICT in physical education and Paraphrase the use of technology in physical education

Course Content

UNIT- I

08 Hours

Teaching Process: Effective teaching and teacher responsibilities review of methods of teaching Techniques of presentation and class management skills

Planning Lesson: Structure and stages of lesson plan, preparing for a lesson plan, finding material and tapping resources

Feedback: teacher's self-evaluation, student feedback on lesson content and lesson effectiveness

UNIT- II

08 Hours

Developmental Program: Developmental curriculum, Physical education content, Movement skill development - Stability skills - Manipulative skills - Locomotors and non-locomotors skills, Developmental games, modified games, dance and gymnastic

UNIT- III

07 Hours

Technology in Physical Education and Sports: Initiating technology, Use of Audio/Video technology, Image analysis, Technological devices used in Physical activity, sports (adobe premiere, underwater camera, various measuring tools, wind gauges, foul indicators, electronic gadgets, adobe Photoshop, Microsoft animation, laser beam technology, LCD display, software for different game and sports)

UNIT IV**07 Hours**

Use of ICT in Physical Education: Computer analysis instructional software - Assessing student learning - Using technology to improve instructional process - Use of World Wide Web, Power point presentation

Transaction Mode

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

Suggested Readings

- Adams William C., *Foundation of Physical Education Exercise and Sports Sciences*, Philadelphia, 1991
- Gupta Rakesh, Sharma Akhilesh, and Sharma Santosh, *Professional Preparation and Curriculum Design in Physical Education & sports Sciences*, New Delhi, Friends Publications, 2004
- Hoover. Kenneth H., *The Professional Teacher"s Handbook*, Boston, Allyn and Bacocon, 1972
- Krik David, *Physical Education and Curriculum Study*, Kent, Croom Helm, 1988
- SandhuKiran, *Professional Preparation and Career Development in Physical Education*, New Delhi, Friends Publications, 2004
- SandhuKiran, *Trends and Development in Professional Preparation in Physical Education*, New Delhi, Friends Publication, 2006
- Wessel Janet A, and Kelly Luke, *Achievement-Based Curriculum Development in Physical Education*, Philadepia, Lea and Febiger, 1986
- Zeigler E.F, *Professional and Scholarly Foundation of Physical Education and Kinesiology*, Sports Educational Technologies, 2007

Course Name: History and Foundations of Physical Education (EF)

Course Code: BPD412

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes:

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

1. The pass out would be able to compare the relationship between general education and physical education.
2. He would be able to identify and relate with the History of Physical Education.
3. He would be able to comprehend the relationship between Philosophy, Education and Physical Education.
4. He would be able to identify the works of Philosophers of Education and Physical Education.

Course Content

UNIT- I

13 Hours

Introduction to Physical Education: Meaning, Definition and Scope of Physical Education, Aims and Objective 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

10 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)

Educational and cultural values of Olympic movement

UNIT- III

12 Hours

Philosophical Foundation of Physical Education: Philosophical foundation: 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

10 Hours

Foundation of Physical Education

Biological: Growth and development, Age and gender characteristics, Body Types

Psychological: Attitude, interest, Cognition, emotions and sentiments

Sociological: Society and culture, Social acceptance and recognition.

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, Neel Kamal 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, VinodPustakMandir, 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, DariyaGanj, Delhi (India)*

Course Name: Health and Wellness Trainer (VAC)**Course Code: BPD414**

L	T	P	Cr
2	0	0	2

Total Hours: 30**Learning Outcomes:**

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

1. To attain the knowledge about various components off Fitness.
2. Improve the knowledge in the area of physical fitness and the wellness of women at various stages in their life.
3. To get an idea about various tests to assess the fitness and wellness.
4. To know various diseases and their effects on human being.

Course Content**UNIT-I****08hours**

Meaning and Definition” of Physical Fitness, Physical Fitness Concepts and Techniques, Principles of physical fitness, Physiological principles involved inhuman movement, Components of Physical Fitness. Current trends in fitness and conditioning, Learning stage; media application stage and computer application stage

UNIT-II**07 hours**

Components of total health fitness and the relationship between physical activity and lifelong wellness, Nutrients; balanced diet - mal nutrition, Weight Management–proper practices to maintain lose and gain.

UNIT-III**08 hours**

Endurance Training, Safety techniques –proper warm-up, cools down, and stretching, Assess cardio respiratory fitness and set goals to maintain or improve fitness levels. Cardio respiratory activities including i.e. interval training, in cline running, distance running, aerobics and circuits.

UNIT-IV**07 hours**

Resistance Training for Muscular Strength and Endurance; principles of resistance training, Safety techniques, Resistance training principles and concepts; basic exercises (including free weight exercise, weight machines, exercise bands and tubing, medicine balls, fit balls) Advanced techniques of weight 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:

- Sutton-Kerchner, M. (2019). *Healthy stress management*. Retrieved from <http://fitnessandwellnessnews.com/healthy-stress-management/>
- Swami Muktibodhananda. (1998). *Hatha Yoga Pradipika*. The Yoga Publication, Bihar.
- Tummers, N. E. (2013). *Stress Management: A Wellness Approach*. Human Kinetics.
- Diwekar, R. (2009). *Don't Lose Your Mind, Lose Your Weight*. Random House India, Mumbai.
- Miller, D. K., & Allen, T. E. (1989). *Fitness: A Lifetime Commitment*. Surjeet Publication, Delhi.
- Difcore, J. (1998). *The Complete Guide to Postnatal Fitness*. A&C Black Publishers Ltd., 35 Bedford Row, London.
- Uppal, A. K. (1992). *Physical Fitness*. Friends Publications, India.
- Koeger, W. K., & Hoeger, S. A. (1990). *Fitness and Wellness*. Morton Publishing Company.
- Elizabeth, & Kenday. (1986). *Sports Fitness for Women*. B.T. Batsford Ltd., London.
- Foster, E. R., Hartiger, K., & Smith, K. A. (2002). *Fitness Fun*. Human Kinetics Publishers.
- Lawrence, D. (1999). *Exercise to Music*. A & C Black Publishers Ltd., 37 Sohe Square, London.
- Malt, R. (n.d.). *90 Day Fitness Plan*. D.K. Publishing Inc.

Course Name: Environmental Science (EVS)(Discipline Elective-V)

Course Code: BPD415

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes:

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

1. The course shall develop in student the scientific background needed to Interpreting how the earth works and how we, as human beings, fit into that.
2. Describes need of food for people of different age groups, animals/birds, availability of food and water and use of water at home and surroundings
3. At the end of the course, it is expected that students will be able to identify and analyze environmental problems as well as the risks associated with these problems.
4. records observations, experiences, information on objects/activities/places visited in different ways and predicts patterns

Course Content

UNIT-I

09 Hours

Multidisciplinary Nature of Environmental Studies
Descriptors/Topics: Introduction to environmental studies with their importance, Need for public awareness, Sensitization and participation, Swatch Bharat Abhiyan

UNIT-II

10 Hours

Natural Resources Descriptors/Topics: Types of natural resources and their importance

Food resources: World food problems and related aspects, Land resources, Water resources, Forest resources- use and overuse, Minerals and Energy resources- importance of renewable and sustainable energy, Equitable use of resources for sustainable lifestyles, Role of an individual in conservation of natural resources

UNIT- III

12 Hours

Ecosystems Descriptors/Topics: Concept of an ecosystem, Types of ecosystem, Structure and function of an ecosystem, Producers, consumers and decomposers

Energy flow in the ecosystem, Food chains, food webs and ecological pyramids, Ecological succession

Introduction: types, characteristic features, structure and function of Forest ecosystem, Grassland ecosystem and Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, ocean estuaries)

UNIT- IV 14 Hours

Biodiversity Descriptors/Topics:

Introduction - Definition: genetic, species and ecosystem diversity, Bio-geographical classification of India

Value of biodiversity: consumptive use, productive use, social, ethical aesthetic and option values, Bio-diversity at global, national and local levels, India as a mega diversity nation, Hot spots of biodiversity

Threats to biodiversity: habitat loss, poaching of wildlife, man wildlife conflicts, Endangered and endemic species of India

Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity

Transaction Mode

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

Suggested Readings

- Khaushik, & Khaushik. *Fundamentals of Environmental Studies*.
- Somvanshi, & Dhupper. *Fundamentals of Environmental Studies*.
- Gauba, & Bisht. *Environmental Studies, Challenges & Solutions: A Quick Compendium*.
- Asthana, & Asthana. *A Textbook of Environmental Studies*.

Course Name: Professional Ethics in Physical Education(Discipline Elective-V)

Course Code: BPD416

Total Hours: 45

L	T	P	Cr
3	0	0	3

Learning Outcomes:

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

1. To develop an understanding of ethical principles and values in physical education
2. To enhance decision-making skills in ethical dilemmas related to sports and physical education.
3. To promote professional conduct and responsible coaching practices
4. To cultivate sportsmanship, fair play, and integrity in sports

Course Content

UNIT- I

14 Hours

Introduction to Professional Ethics in Physical Education, Overview of the course objectives and significance of ethics in physical education, Introduction to ethical principles and their application in sports and physical education contexts

UNIT- II

13Hours

Ethical Principles in Sports and Physical Education, Examination of ethical principles such as fairness, integrity, respect, and responsibility, Analysis of case studies highlighting ethical issues in sports and physical education, Discussions on the importance of ethical behavior and its impact on the learning environment

UNIT- III

10 Hours

Sportsmanship and Fair Play: Understanding the concepts of sportsmanship and fair play, exploring the role of sportsmanship in promoting respect, teamwork, and healthy competition, Analysis of real-life examples of sportsmanship and fair play in various sports contexts

UNIT- IV

08 Hours

Ethical Decision Making in Physical Education: Introduction to the decision-making process and ethical frameworks, Analysis of ethical dilemmas in physical education and sports, Practice in applying ethical reasoning and making informed decisions in challenging situations.

Transaction Mode

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

Suggested Readings

- *Authors: Claude Scheuer and Jean-Luc Thill - Luxembourg Editor: CharlotCassar Last edition: October, 2015*
- *Authors : R.S. Naagarazan July 2006, Professional Ethics in human Value*

Course Name: Fitness Training and Nutrition
(Discipline Elective-V)
Course Code: BPD417

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes:

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

1. Will develop skills to establish daily caloric requirement and to design the diet plan
2. Will acquaint student with principles of sports nutrition
3. Will orient the student to the role of food on Physical performance
4. Would make the student understand and prepare weight management plan

Course Content

UNIT- I

10 Hours

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

UNIT- II

12 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

13 Hours

Nutrition and 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

10 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. *J Clin 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 metaanalysis. *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: a randomized controlled trial *JAMA* 299(3), 316-323
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Course Name: Practical Orientation in
Yoga(Entrepreneurship)
CourseCode:BPD409

L	T	P	Cr
0	0	4	2

Total Hours: 60

Learning Outcomes:

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

1. Interpret the various concepts of yogic practice.
2. Demonstrate yoga asanas and explain its benefits.
3. Undertake teaching practice and research in the field of yoga.
4. Gain knowledge about how to improve hasta mudra.

Course Content

Meaning, Definition, types, aims and objectives of yoga

Aasanas and Pranayam:

Nadis, Chakars, Kriyas ShatKriyas: neti, dhuati, kapalapati, trataka, nauli, basti

Bandhas:

jalendrabadha, jivhabandha, uddiyanabadha, mulabadha

Mudras asamyuktahastam, samyuktahastam, manamudra, kayamudra, bandamudra, adharamudra

Meditation: Passive and active meditation, saguna meditation and nirguna meditation

Course Name: Project Meet(Athletics) (Skill Based)**CourseCode:BPD413**

L	T	P	Cr
0	0	4	2

Total Hours: 60**Learning Outcomes:**

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

1. Develop effective project management skills, including project planning, scheduling, resource allocation, and risk assessment, to successfully execute Project Meet initiatives.
2. Analyze and apply advanced tools and techniques for project monitoring and control, ensuring that Project Meet stays on track, within scope, and on budget.
3. Demonstrate leadership and team work abilities by collaborating with diverse stakeholders, managing conflicts, and fostering a positive project environment during Project Meet execution.
4. Evaluate the outcomes and impact of Project Meet on the targeted audience or community, and prepare comprehensive reports and presentations to communicate project results effectively.

Course Content**60Hours**

Students will organize project meet