# **GURU KASHI UNIVERSITY**



# **Bachelor of Physical Education**

**Session: 2023-24** 

**Department of Physical Education** 

#### GRADUATE OUTCOMES OF THE PROGRAMME:

This Programme encompasses, 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:** After completion of the program, the learner will be able to:

- 1. Acquire knowledge of the structure and function of the human body, including the musculoskeletal, cardiovascular, and respiratory, 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**

	Seme	ester I					
Course	Course Title	Type of Course		1	1		
Code			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	Ability Enhancement	2	0	0	2	
BPD107	Track and Field-I	Technical Skills	0	0	4	2	
BPD108	Games & Sports-I	Technical Skills	0	0	4	2	
BPD109	Drill and Marching	Technical Skills	0	0	4	2	
BPD199	xxx	MOOC				2	
	Discipline Elective-I (Any one of the following)						
BPD114 BPD115	Yogic Science Sports Technology	Discipline					
BPD116	Health Education and Sports Nutrition	Elective-I	3	0	0	3	
	Open Elect	tive Course	•		•		
xxx	xxx	IDC	2	0	0	2	
	Total 15 0 12 23						
	Open Electives Courses	(For other Departr	nent	s)	•		
BPD117	Yoga and Recreation	OE	2	0	0	2	

	Semester II						
Course	Course Title	Type of Course					
Code			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	Technical Skills	0	0	4	2	
BPD208	Games & Sports II	Technical Skills	0	0	4	2	
BPD209	Mass Demonstration	Technical Skills	0	0	4	2	
BPD213	Gymnastic I	Technical Skills	0	0	2	1	
	Value Added courses (For other discipline students)						
BPD210	Leadership Skills	Value Added Course	2	0	0	2	
	Discipline Elective-II (A	any one of the follo	owin	g)			
BPD214	Value and Environmental Education		P				
BPD215	Applied Statistics in Physical Education	Discipline Elective-II	3	0	0	3	
BPD216	Education Technology in Physical Education						
	Total				14	20	

	Semes	ster III				
Course Code	Course Title	Type of Course	L	Т	P	Cmadit
BPD314	Scientific Principles of		ь	1	P	Credit
BFD314	Sports Training	Core	4	0	0	4
BPD315	Sports Medicine	Core	4	0	0	4
BPD311	Track and Field III	Technical Skills	0	0	4	2
BPD316	Games Specialization	Technical Skills	0	0	4	2
BPD317	Teaching Practices I	Technical Skills	0	0	4	2
BPD318	Gymnastic II	Technical Skills	0	0	4	2
	Discipline Elective-III (Any one of the following)					
BPD319	Olympic Movement					
BPD320	Sports Engineering	Discipline Elective-III	3	0	0	3
BPD321	Physical Fitness and	Elective-III	P			
	Wellness					
	Ope	n Elective Course	.1			l
XXX	xxx	IDC	2	0	0	2
	Total 13 0 16 21					21
	Open Electives Courses	(For other Departs	ment	s)		1
OEC029	Sports Nutrition and Weight Management	OE	2	0	0	2

	Semester IV						
Course	Course Title	Type of Course					
Code			L	T	P	Credit	
BPD405	Sports Management	Core	4	0	0	4	
BPD406	Anatomy and Physiology	Core	4	0	0	4	
BPD407	Technological Innovations	Ability	2	0	0	2	
	in Physical Education	Enhancement		0	0	2	
BPD408	Teaching Practice II	Technical Skills	0	0	4	2	
BPD409	Practical Orientation in Yoga	Technical Skills	0	0	4	2	
BPD410	Internship (06 Week)	Internship				6	
	Total			0	8	20	
	Grand Total			0	50	84	

# **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- Term paper/Quiz/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. Extend the physiological effects of Exercise on different human body systems
- 2. Aappreciate the role of energy systems of human body during sports activities
- 3. Analyse and implicate the role of nutrition & its relevance in energy production during sports
- 4. 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 & microstructure of the skeletal muscle

Chemical composition: Sliding filament theory of muscular contraction, Types of muscle fiber, Muscle tone.

UNIT II 15 Hours

Cardiovascular 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 cardiovascular 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 14 Hours

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 15 Hours

Climatic conditions and sports performance and ergogenic 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

- Kumar, A. and Moses, R.(1995).Introduction to Exercise Physiology. Poompugar Pathipagam, Madras.
- Beotra, A.(2000). Drug Education Handbook on Drug Abuse in Sports. 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, WMC.



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. Perform anthropometric measurements
- 4. Analyse and interpret the results of tests and measurements used in the field of physical education

## **Course Content**

UNIT I 14 Hours

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 16 Hours

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 for boys and girls), JCR test Motor ability, Barrow motor ability test, Newton 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 (revisedin1984), 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 15 Hours

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

Anaerobic Capacity: Margariakala men test, Wingate anaerobic test Anthropometric measurements: Method of measuring height, standing height, sitting height Method of measuring Circumference: Arm, waist, hip, thigh

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

UNIT IV 15 Hours

Sports Skills Test:

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

Badminton: Lockhart Mc. Pherson 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

- Authors Guide, (2013).ACSM's Health Related Physical Fitness Assessment Manual. ACSM Publications, USA
- Collins, R.D., &Hodges P.B.(2001) A Comprehensive Guide to Sports Skills Tests and Measurement, (2<sup>nd</sup> edition).Scarecrow Press,Lanham.
- Cureton, T.K. (1947). Physical Fitness Appraisal and Guidance. The C. Mosby Company, St. Louis.
- Getchell,B. (1979). Physical Fitness A Way of Life,2<sup>nd</sup> Edition. John Wiley and Sons, Inc, New York.
- Jenson, Clayne R. and Cyntha, C. Hirst. (1980). Measurementin Physical Education and Athletics Macmillan Publising Co. Inc, New York.

Course Name: Communication Skills

**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 verbal and non-verbal communication techniques in the professional environment
- 4. Learn the dynamics of social communication

### **Course Content**

UNIT I 05 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 05 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 10 Hours

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/ bus stations/ airport /sports announcement/ commentaries etc.), Academic Listening (Listening to Lectures), Listening to Talks and Presentations, Note Taking Tips

UNIT IV 10 Hours

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

- Ian Tuhovsky (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.
- ThichNhatHanh (2014), The art of communicating (2013), HarperCollins Publishers LLC.

Course Name: Yogic Science

**Course Code: BPD114** 

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 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. Interpret the basics and benefits of Yoga

## **Course Content**

UNIT I 09 Hours

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 time

Meaning and definition of astanga yoga: Yama, niyama, aasna, pranayama, prathyahara, dharana, dhyana, Samadhi

UNIT II 10 Hours

Nadis, Aasanas and Pranayam Loosen in exercise: Techniques and benefits Asanas & Pranayam: Types, techniques and benefits, suryanamaskar, methods and benefits

Nadis: Meaning, methods and benefits

Asanas: Meaning, types of Asanas, preparation & technique of different asanas and their effects on the body

UNIT III 14 Hours

Shat Kriyas: Meaning, techniques and benefits of neti, dhati, kapalapathi, trataka, nauli, basti

Bandhas: Meaning, techniques and benefits of jalendrabandha, jihvabandha, uddiyanabandha, mulabandha

Mudras: Meaning, techniques and benefits of hasta mudras, 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 12 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, muscular system and endocrine glands

## **Transaction Mode**

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

- Feuerstein, G. (1975).Suggested Readingsof Yoga.MotilalBansaridassPublishers(P)Ltd., London.
- Gore (1990). Anatomy and Physiology of Yogac Practices. Kanchan Prakashan, Lonavata.
- Purperhart, H. (2004). The Yoga Adventure for Children. A Hunter House book, Netherlands
- Iyengar, B.K.S. (2000).LightonYoga.Harper Collins Publishers, New Delhi
- Karbelkar, N.V. (1993). Patanjal Yogasutra Bhashya (Marathi Edition). Hanuman Vyayam Prasarak Mandal.

Course Name: Sports Technology

**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. Identify design of sports equipment and develop skills to optimise 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 10 Hours

Sports Technology: Meaning, definition, purpose, advantages and applications, general principle and purpose of instrumentation in sports, Work flow 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 14 Hours

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 09 Hours

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 12 Hours

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

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

Course Name: Health Education and Sports Nutrition

(Discipline Elective)
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

- Bucher, Charles A.Administration of Health and Physical Education Programme.
- 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, TheGaleGroup, Inc.
- Boyd-Eaton S. etal.(1989). The Stone Age Health Programme: Diet and Exercise as Nature Intended. Angus and Robertson.
- TerrasS.(1994).Stress, How Your Diet can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acid. Thorons.

Course Name: Yoga and Recreation

**Course Code: BPD117** 

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. Comprehend various concepts of yogic practice.
- 2. Execute yoga asanas and elucidate their advantages.
- 3. Plan and oversee recreational camps.
- 4. Exhibit professional leadership in managing students' intramural and recreational activities.

#### **Course Content**

UNIT I 10 Hours

Yoga: Introduction, Meaning, Aim and Objectives, Origin, Types (Raj Yoga, Mantra Yoga, Bhakti Yoga, Karma Yoga), Relationship of Yoga with Physical Education and Sports, Yoga as Science and Yoga as an Art

Yoga Asanas: Introduction, Classifications, Techniques, precautions and Benefits of Tadasana, Konasana, Trikonasana, Parasvakonasana, Veer Bhadharasana, Goumukhasana, Vajrasana, Ardh-matsyandrasana, Padmasana, Mundook Asana, Pashchimottan Asana, Chakarasana, Dhanurasana, Sarvaangasana, Hal Asana and Makkarasana

Purification Techniques (Shat Kriyas) of Yoga: Neti, Dhauti, Basti, Nauli, Kapalhati and Trataka

UNIT II 06 Hours

Yoga as an Activity and Relaxation Techniques:

Yam, Niyama, Asanas, Pranayama, Pratyahar, Dharna, Dhayan and Samadhi Pranayama: Introduction, Types and its importance

Meditation: Introduction, Types and Techniques of Meditation

UNIT III 07 Hours

Recreation: Meaning, Definition, Aims, Objectives and Scope of Recreation Need and Importance of Recreation in Physical Education & Sports, Development of Recreational activities in India since 1947, Agencies providing Recreation of India UNIT IV 07 Hours

Leadership: Meaning and Types, Importance of Leadership in Physical Education & Sports, Qualification, Qualities and Training of a good Leader, Facilities needed for Community Recreation, Type of Recreational Activities

#### **Transaction Mode**

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

- Debnath, Monika, "Basic Core Fitness through Yoga and Naturopathy" (2006-07) Sports Publication, Darya Ganj, New Delhi.
- Lyengarm B.K.S " The llustrated Light of Yoga" (1982) Great Britain, George Allenand Unwin.
- Bulter, George D: Introduction to Community, Recreation, MC Graw Hill Book Company, Inc. New York, 1967.
- Domick, Hedley S: Administrative of Modern Camp, New York, Association Press
- Singh, Amandeep, Yoga: Saririk Sikhya de Sandharv Vich (Punjabi). Twenty first Century Publications, Patiala, Punjab, 2014.

Course Name: Track and Field-I (Practical)

**Course Code: 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 interpret the rules & regulations of running events.
- 4. Gain expertise in clearance and landing techniques.

#### **Course Content**

60 Hours

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 (Practical)

**Course Code: 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**

60 Hours

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 removing drills, Floating Mushroom and Jellyfish, 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, Holding rifle/ Pistol, aiming target, Safety issues related to rifle shooting, Rules and their interpretations and duties of officials

Course Name: Drill and Marching (Practical)

**Course Code: BPD109** 

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 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 count, four count, eight count and sixteen count Standing Exercise, Jumping Exercise, Moving Exercise

Aerobics: Introduction of Aerobics, Rhythmic Aerobics –dance, Low impact aerobics, High impact aerobic so Aerobics kick boxing, Postures –Warm up and cool down, THR Zone –Being successful in exercise and adaptation to aerobic workout

## 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 15 Hours

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

UNIT II 15 Hours

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

UNIT III 14 Hours

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

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

UNIT IV 16 Hours

Projectile and Lever:

Freely falling bodies: Projectiles, equation of projectiles, Stability, factors influencing equilibrium, guiding principles for stability, static and dynamic

stability, Meaning of work, power, energy, kinetic energy and potential energy, Leverage, classes of lever, practical application, Water resistance, Air resistance, aero dynamics

Analysis of movement: Types of analysis, Kinesiological, Biomechanical Cinematographic, Methods of analysis–qualitative, quantitative, predictive Principles and Analysis of following movement (Throwing, Striking, Jumping Squat, Dead Lift)

#### **Transaction Mode**

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

- Deshpande, S.H. (2002). Manav Kriya Vigyan Kinesiology (Hindi Edition). Amravati.
- Hanuman VyayamPrasarakMandal.
- Hoffman,S.J. (2005).Introduction to Kinesiology.Human Kinesiology publication In..
- Steven Roy,&RichardIrvin. (1983). Sports Medicine. Prentice Hall Inc.,NewJersery.
- Thomas. (2001). Manual of structural Kinesiology. McGraw Hill, New York.
- Uppal, A. K. & Lawrence, Mamta. (2004). MP Kinesiology. Friends Publication, India.
- Uppal, A. (2004).Kinesiology in Physical Education and Exercise Science.Friendspublications, Delhi.
- Williams, M. (1982). Biomechanics of Human Motion. Saunders Co, Philadelphia.

Course Name: Sports Psychology

**Course Code: BPD212** 

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 sportspersons and their coping techniques.

#### **Course Content**

UNIT I 15 Hours

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 14 Hours

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, Kinesthesiometer board)

Questionnaire: Sports achievement motivation, sports competition anxiety

UNIT IV 15 Hours

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

- 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 SahetyKendrePublishers.
- Jay Coakley. (2001). Sports in Society— Issues and Controversies in International Education. Mc-Craw Seventh Ed
- John D Lauther(2000). Psychology of Coaching. PrenticceHall Inc., New Jersy.
- MiroslawVauks&BryantCratty(1999). Psychology and the Superior Athlete. The Macmillan, London.

Course Name: Leadership Skills

**Course Code: 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 05 Hours

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

UNIT II 10 Hours

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

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

UNIT III 10 Hours

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

UNIT IV 05 Hours

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

# **Transaction Mode**

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

- 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: Value and Environmental Education

**Course Code: BPD214** 

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 14 Hours

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 recycling & prohibition of plastic bag/cover, Role of school in environmental conservation and sustainable development pollution free ecosystem.

UNIT III 10 Hours

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 09 Hours

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

- 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 Co. Pvt. 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. Web enhanced Ed.



Course Name: Applied Statistics in Physical Education

**Course Code: BPD215** 

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 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. Analyse the Statistical data in the field of physical education and sports.

#### **Course Content**

UNIT I 12 Hours

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

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

UNIT II 14 Hours

Data Classification, Tabulation and Measures of Central Tendency: Meaning, uses and construction of frequency table, Meaning, purpose, calculation and advantages of Measures of central tendency–Mean, median and mode Measures of Dispersions and Scales: Meaning, purpose, calculation and advances of Range, Quartile deviation, Mean deviation, Standard deviation, Probable error Meaning, purpose, calculation and advantages of scoring scales- Sigma scale, Z scale, Hull scale

UNIT III 09 Hours

Probability Distributions and Graphs:

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

Divergence form normality: Skewness and Kurtosis

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

UNIT IV 10 Hours

Inferential and Comparative Statistics:

Tests of significance: Independent "t" test, dependent "t" test, chi square

test, level of confidence and interpretation of data

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

#### **Transaction Mode**

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

- Best, J.W. (1971). Research in Education, Prentice Hall, Inc, New Jersey.
- Clark, D.H. (1999). Research Problem in Physical Education, II edition. Prentice Hall, Inc., Eagle wood Cliffs.
- Jerry, R Thomas.&Jack,K Nelson. (2000).Research Methods in Physical Activities. Human Kinetics, Illonosis.
- Kamlesh, M.L. (1999).Research Methodology in Physical Education and Sports. KSK Publishers, New Delhi.
- Rothstain, A. (1985).Research Design and Statistics for Physical Education. Prentice Hall, Inc., Engle wood Cliffs.
- Sivarama Krishnan, S. (2006).Statistics for Physical Education.Friends Publication, Delhi.
- Thirumalaisamy,(1998).Statistics in Physical Education.Senthilkumar Publications, Karaikudi.

Course Name: Education Technology in Physical Education

**Course Code: BPD216** 

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. 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 07 Hours

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 14 Hours

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 12 Hours

Audio Visual Media in 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 interactive 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 12 Hours

New Horizons of Educational Technology:

Recent innovations in the area of ET interactive video: Hypertext, videotexts, optical fiber technology, laser disk, computer conferencing etc, Procedure and organization of Tele conferencing/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

- AmitaBhardwaj. (2003). New Media of Educational Planning, Sarupof Sons, New Delhi
- Bhatia and Bhatia (1959). *The Principles and Methods of Teaching*. Doaba House, New Delhi.
- Essentials of Educational Technology, MadanLal, Anmol Publications
- Sampath, A. Pannirselvam and S. Santhanam. (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.
- Kozman, Cassidy and k Jackson. (1952). *Methods in Physical Education*. W.B. Saunders Company, Philadelphia and London

Course Name: Track and Field-II (Practical)

**Course Code: 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**

60 Hours

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 (Practical)

**Course Code: BPD208** 

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 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 underarm, Backhandoverhead 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-Forehand, Backhand, Side Spin, High Toss, Strokes-Push, Chop, Drive, Half Volley, Smash, Drop-shot, Balloon, Flick Shit, 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-Under hand and Over hand, 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 Ground strokes-Forehand drive, Backhand drive, Basic service, Basic Volley, Over-head Volley, Chop, Tactics –Defensive, attacking in game, Rules and their interpretations and duties of officials

**Course Name: Mass Demonstration (Practical)** 

**Course Code: BPD209** 

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. Achieve fundamental skills of various demonstrative activities.
- 2. Analyze the type of activities and its style to perform in group
- 3. Acquire the skill of teaching these activities.
- 4. Demonstrate various sports activities

### **Course Contents**

60 Hours

Mass demonstration activities: Lezium, dumb-bell, umbrella, tipri, wands, hoops, free arms drill, folk dances, etc. (Student sure expected to learn and organize mass drill in school situation)

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 count, eight count and sixteen count. Standing exercise, jumping exercise, Moving exercise, Combination of above all.

Malkhamb: Table of exercises on malkhamb should be prepared internally for teaching, General out-line of the contents of teaching of theory of Games and Sports, Introduction of the game/sport and historical development with special Text Book to India, orientation of the students to the play are and equipment used in the game / sport, Important tournaments held at National and International levels, Distinguished sports awards and personal it misrelated to the Game/sport, Warming-up-general free hand exercises, specific workout using equipment, Fundament al skills, lead up activities, general rules and the reinterpretations, duties of officials, officiating class competition sand Intramurals, Marking of the play area

Course Name: Gymnastic I (Practical)

**Course Code: BPD213** 

L	T	P	Cr
0	0	2	1

**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

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.

Parallel bar for Boys Balancing Beam for Girl

#### Semester III

Course Name: Scientific Principles of Sports Training

**Course Code: BPD314** 

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. 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 14 Hours

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

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

Remedial measures: Super compensation, altitude training, cross training

UNIT II 15 Hours

Methods of Training: Methods of Training: Importance, Principles

Types of training - Weight training, Circuit training, Interval training, Fartlek training, Cross-Country and Plyometric 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 15 Hours

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

Specials type Training: Plyometric 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

UNIT IV 16 Hours

Training Plan: Macro cycle, meso cycle, 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 AbuseinSports. 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. Mosphy Company, St. Louis.
- Daniel, D. Arnheim (1991). Principles of Athletic Traning. Mosby Year Book, St. Louis.
- David, R. Mottram (1996). Drugsin Sport. School of Pharmacy, John Moore University, Liverpool
- Gary, T. Moran (1997). Cross Training for Sports. Human Kinetics, Canada.



43

Course Name: Sports Medicine

**Course Code: BPD315** 

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. 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 16 Hours

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 14 Hours

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 15 Hours

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 15 Hours

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

- Christopher, M. Norris. (1993). Sports Injures Diagnosis and Management for Physiotherapists. Thomson LithoLtd., East Kilbride.
- James, A. Gould &George J. Davies. (1985). Physical Therapy. C.V. Mosby Company, Toronto.
- Morris, B. Million (1984). Sports Injuries and Athletic Problem. Surject Publication, New Delhi.
- Pande.(1998). Sports Medicine. KhelShitya Kendra, New Delhi.
- The Encyclopedia of Sports Medicine. (1998).

Course Name: Olympic Movement

**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 in action, 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

- Osborne, M. P. (2004). Magictree house fact tracker: ancient greece and the olympics: a nonfictioncompanion to magic tree house: hour of the Olympics. New York: Random House Books for Young Readers
- Burbank, J. M., Andranovich, G. D. & Heying Boulder, C. H. (2001). Olympic dreams: theimpact of mega-events on local politics: Lynne Rienner



Course Name: Sports Engineering

**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, storerooms, 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 10 Hours

Maintenance and Facility life cycle costing:

Basics of 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

- Franz, K.F. et. al., (2013). Rout ledge Handbook of Sports Technology and Engineering Rout ledge.
- Steve Hake. (1996). The Engineering of Sport. CRCPress.
- Youlin Hong. (2013)Rout ledge Handbook of Ergonomics in Sport and Exercise Routledge.
- Jenkins M. (2003). Materials in Sports Equipment, Volume I. Elsevier.

Course Name: Physical Fitness and Wellness

**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 life style.
- 3. Develop competency for profile development, exercise guidelines adherence.
- 4. Physiological effect of human movement

#### **Course Content**

UNIT I 14 Hours

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 10 Hours

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 12 Hours

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 freehand exercise, free weight exercise, weight machines, exercise bands and tubing, Medicine balls, fit balls) advanced techniques of weight training

UNIT-IV 09 Hours

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

- David K. Miller & T. Earl Allen (1989). Fitness, A life time commitment. Surject Publication, Delhi.
- DificoreJudy (1998). The complete guide to the postnatal fitness, A & C Black Publishers Ltd., London.
- Dr. A.K. Uppal (1990). Physical Fitness. Friends Publications, India,
- Elizabeth & Kenday (1986). Sports fitness for women. B.T. Bats fords Ltd, London.
- Emily R. Foster, Karyn Hartiger & Katherine A. Smith (2002). Fitness Fun. Human Kinetics Publishers
- Lawrence, Debbie (1999). Exercise to Music. A & C Black Publishers Ltd., London

Course Name: Sports Nutrition and Weight Management

**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 Spot reduction, 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 body weight, 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

- Lifestyle management in Health and Social care, Merinda Thew and Jim McKenna, BlackwellPublishing 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 B Going, Human Kinetics, USA.
- Science of Flexibility, Michael J Alter, Human Kinetics, USA
- Applied Body Composition Assessment, Vivian H Heyward, Dale R Wagner, Human Kinetics, USA.
- Coping with life stress-the Indian experience, Meena Hariharan, 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 S R

Course Name: Track and Field-III (Practical)

**Course Code: BPD311** 

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 skills to participate and perform in throwing events.
- 2. Gain competency in Ground Marking / Sector Marking for the events.
- 3. Undertake officiating duties during throwing events.
- 4. 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, Hemmer throw, Shot-put
Basic Skills and techniques of the Throwing events: Grip, Stance, Release,
Reserve/ (Follow through action)
Ground marking / Sector Marking

Interpretation of Rules and duties of officials

Course Name: Game Specialization (Practical)

**Course Code: 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 I (Practical)** 

**Course Code: 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 these 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 supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future, In these lessons, the duration should slowly increase and all the part soft he lesson covered progressively.

Course Name: Gymnastic II (Practical)

**Course Code: BPD318** 

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. Paraphrase 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**

Uneven Bar Pommel horse for Boys Horizontal Bar for Girls Parallel bar for Boys Balancing Beam for Girl

#### Semester IV

Course Name: Sports Management

**Course Code: 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. Paraphrase d the concept of sports management.
- 2. Manage events of physical education and sports
- 3. Develop skills of financial management and budget making during sports events.
- 4. Development and knowledge of various sports Events

#### **Course Content**

UNIT I 15 Hours

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 15 Hours

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

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

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

UNIT III 14 Hours

Job Analysis: Descriptions and Specifications

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

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

UNIT IV 16 Hours

Management of Equipment's and Materials:

Introduction, Meaning, Need and Importance, Types, Principles of Purchase, Equipment Care, Maintenance and Disposal, Intramural and Extramural Competitions, Public Relations, Offices and Officials

Communication: Meaning, Types of Communications and Barriers in Effective Communication

### **Transaction Mode**

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

- M.L. Kamlesh. Management Concepts in Physical Education and Sport (2nd revised and updated ed.); New Delhi; Khel Sahitya Kendra, (2016)
- P. Cherlladurai. Sport Management Macro Perspectives; London, Ontario (Canada); Sports Dynamics (1985)
- Allen, L.A. Management & Organization. Kogakusha Co. Tokyo, 1988
- Hert, Renis, New Patterns of Management, McGraw Hill, 1961.
- Sandhu, K. Sports Dynamics: Psychology, Sociology and Management Sivia, G.S. 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.
- Become competent to plan workout regime based on an individual's physiology.
- 4. Gain knowledge about the effect of physical workout 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 14 Hours

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 13 Hours

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

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

Course Name: Technological innovations in Physical Education

**Course Code: BPD407** 

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 an understanding of the technology devices available in a variety of physical education and sports settings.
- 2. Use the World Wide Web as a resource for information
- 3. Evaluate software, technology devices, and websites.
- 4. Discuss the ethical and security issues related to the use of technology

#### **Course Content**

UNIT I 15 Hours

E-mail (generic functions) • word processing (Word) • presentation software (PowerPoint) • spread sheet software (Excel)

Web page design (Composer) • sound • graphics • photography • video • multimedia • electronic communications • pedagogical tools

UNIT II 15 Hours

PE fitness specific technologies sport specific technologies • resources • search techniques • website evaluation • citations • technology standards • physical education standards • efficient teaching with technology technologically-rich learning • distance learning • critical issues in educational technology

### **Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning **Course Name: Teaching Practices II (Practical)** 

**Course Code: BPD408** 

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 teaching assignments for school students.
- 2. Become proficient in preparation and maintenance of records in the school.
- 3. Learn assessment and evaluation methods of the assignments submitted by students.
- 4. Gain knowledge about how to improve teaching and lesson delivery.

### **Course Content**

## **Theory Teaching Lesson Plans**

10 teaching practice lessons out of which 5 lessons in class-room situation and 5 lessons for out-door activities within premises on the students of B.P.Ed course.

Course Name: Practical Orientation in Yoga (Practical)

**Course Code: 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 Shat Kriyas: neti, dhati, kapalapathi, trataka, nauli, basti

Bandhas: jalendrabandha, jihvabandha, uddiyanabandha, mulabandha

Mudras asamyuktahastam, samyuktahastam, mana mudra, kaya mudra, banda mudra, adharamudra

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