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. Extend the physiological effects of Exercise on different human body systems
2. Appreciate the role of energy systems of human body during ports activities
3. Analyze 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 **16Hours**

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 **15Hours**

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,alcoholandHumangrowthhormoneonsportsperformance
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.andMoses,R.(1995).IntroductiontoExercisePhysiology.PoompugarPathipagam,Madras.*
- *Beotra,A.(2000).DrugEducationHandbookonDrugAbuseinSports.SportsAuthorityofIndia,Delhi.*
- *Clarke, D.H. (1975). Exercise Physiology. Prentice Hall Inc.,EnglewoodCliffs,NewJersey.*
- *Fox,E.L.,andMathews,D.K.(1981).ThePhysiologicalBasisofPhysicalEducationandAthletics.SandersCollegePublishing,Philadelphia*
- *Guyton,A.C.(1976).SuggestedReadingsofMedicalPhysiology.W.B.Sandersco.Philadelphia*
- *Richard,W.Bowers.(1989).SportsPhysiology.BrownPublishers,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. Identifytheneed&importanceoftest,measurementandevaluationinphysicaleducation
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 (revisedin1984),American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) youth physical fitness test, American College of Sports Medicine (ACSM)healthrelatedphysicalfitnesstest,Roger'sphysicalfitnessIndex
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: Margariakalamen 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 **15Hours**

Sports Skills Test:
Basketball: Johnson basket ball test, Knox basket ball test, Harrison basket ball 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

- *AuthorsGuide,(2013).ACSM'sHealthRelatedPhysicalFitnessAssessmentManual.ACSMPublications,USA*
- *Collins,R.D.,&HodgesP.B.(2001)AComprehensiveGuidetoSportsSkillsTestsandMeasurement,(2nd edition).ScarecrowPress,Lanham.*
- *Cureton,T.K.(1947).PhysicalFitnessAppraisalandGuidance.TheC.MosbyCompany,St.Louis.*
- *Getchell,B.(1979).PhysicalFitnessAWayofLife,2nd Edition.JohnWileyandSons,Inc, NewYork.*
- *Jenson, ClayneR. and Cyntha, C. Hirst. (1980).MeasurementinPhysicalEducationandAthleticsMacmillanPublisingCo. Inc,NewYork.*

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 **05Hours**

Communication: An Introduction, Definition, Nature and Scope of Communication, Importance and Purpose of Communication, Process of Communication, Types of Communication
Non-
VerbalCommunication,PersonalAppearance,Gestures,Postures,FacialExpression, Eye Contacts, Body Language(Kinesics), Time language, Silence, Tips for Improving Non-Verbal Communication

UNIT-II **05Hours**

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),
ActiveListening:anEffectiveListeningSkill,BenefitsofEffectiveListening,BarrierstoListening,ListeningtoAnnouncements-
(railway/busstations/airport/sportsannouncement/commentariesetc.),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),CommunicationSkillsTraining,CreateSpaceIndependentPublishingPlatform.*
- *JamesW.Williams(2020),CommunicationSkillsTraining,AmazonDigitalServicesLLC-KDPPrintUS.*
- *DebraFine(2014),TheFineArtofSmallTalk(2005),HachetteBooks.*
- *ThichNhatHanh (2014), The art of communicating (2013), HarperCollinsPublishersLLC.*

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.andFurness,J.A.G.(1987).SelectionofEngineeringMaterials.ButterworthHeiremann,UK.*
- *Finn, R.A. and Trojan P.K. (1999).Engineering Materials andtheirApplications.JaicoPublisher,UK*
- *Mongilo,J.(2001).NanoTechnology101.Greenwoodpublishinggroup,New York.*
- *Walia, J.S.1999).Principles and Methods of Education.PaulPublishers,Jullandhar*
- *Kochar,S.K.(1982).MethodsandTechniquesofTeaching.SterlingPublishersPvt.Ltd, NewDelhi,Jullandhar.*
- *Kozman,CassidyandJackson.(1952).MethodsinPhysicalEducation.W.B.SaundersCompany,PhiladelphiaandLondon*

Course Name: Value and Environmental Education (Discipline Elective-I)
CourseCode: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 **12Hours**

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

- *MillerT.G.Jr.(1971).EnvironmentalScience.WadsworthPublishingCo.,U.S.A*
- *Rao,M.N.&Datta,A.K.(1987).WasteWaterTreatment.Oxford&IBHPublicationCo.Pvt.Ltd.,India.*
- *Heywood, V.H. and Watson V.M., (1995) Global biodiversityAssessment.CambridgeUniversityPress,U.K.*
- *Jadhav, H. and Bhosale, V.M.(1995).Environmental Protection andLaws.HimalayaPub.House,Delhi.*
- *McKinney,M.L.andSchoel,R.M.(1996).EnvironmentalScienceSystemandSolution.WebenhancedEd.*

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 **09Hours**

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 **14Hours**

HealthProblemsinIndia:Communicableandnon-communicablediseases,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 **10Hours**

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 **12Hours**

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,CharlesA.AdministrationofHealthandPhysicalEducationProgramme.*
- *Ghosh,B.N."TreatiesofHygieneandPublicHealth".*
- *Hanlon,JohnJ.(2003).PrinciplesofPublicHealthAdministration.Turner,C.E.*
- *NutritionEncyclopedia,editedbyDeloresC.S.James,TheGaleGroup,Inc.*
- *Boyd-EatonS.etal.(1989).TheStoneAgeHealthProgramme:DietandExerciseasNatureIntended.AngusandRobertson.*
- *TerrasS.(1994).Stress,HowYourDietcanHelp:ThePracticalGuidetoPositiveHealthUsingDiet,Vitamins,Minerals,HerbsandAminoAcid.Thorons.*

Course Name: Sports Nutrition and Weight Management (OE/ID)
CourseCode: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 **05Hours**

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 **10Hours**

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 **09Hours**

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 **06Hours**

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

- *LifestylemanagementinHealthandSocialcare,MerindaThewandJimMcKenna,BlackwellPublishingUnitedKingdom*
- *PredictingHealthbehavior,MarkConnorandPaulNorman,OpenUniversityPress,Buckingham,UK*
- *HealthBehaviorandhealtheducation:Theory,researchandPractice,KarenGlanz,BarbaraRimer,Viswanath,Johnwileyandsons,USA.(Freepdfbook)*
- *HumanBodyComposition,StevenBHeymstead,TimothyLohan,ZimianWang,ScottBGoing,HumanKinetics,USA.*
- *Science of Flexibility, MichaelJAlter,HumanKinetics,USA*
- *AppliedBodyCompositionAssessment,VivianHHeyward,DaleRWagner,HumanKinetics,USA.*
- *Copingwithlifestress-theIndianexperience,MeenaHariharan,AmazonBooks*
- *StressManagement-aWellnessapproach,NanetteETummers,HumanKinetics,USA.*
- *Wellness Workbook: How toachieve enduring healthandvitality, John W TravisandReginaSR*

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

60Hours

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. Becomecompetentinmaintainingthecorrectpostureandbodypositionwhileperforminginthementionedevents.

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 kills 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

60Hours

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). ManavKriyaVigyan-Kinesiology (Hindi Edition).Amravati.*
- *HanumanVyayamPrasarakMandal.*
- *Hoffman,S.J.(2005).IntroductiontoKinesiology.HumanKinesiologypublicationIn..*
- *Steven Roy,&RichardIrvin. (1983). Sports Medicine. Prentice HallInc.,NewJersery.*
- *Thomas.(2001).Manual ofstructuralKinesiology.McGrawHill,NewYork.*
- *Uppal,A.K.&Lawrence,Mamta.(2004).MPKinesiology.FriendsPublication,India.*
- *Uppal, A. (2004).Kinesiology in Physical Education and ExerciseScience.Friendspublications,Delhi.*
- *Williams,M.(1982).BiomechanicsofHumanMotion.SaundersCo,Philadelphi*

Course Name: Sports Psychology
CourseCode: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 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 **16Hours**

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)CatalogueofTests.NationalCouncilofEducationalResearchandTraining Publication,NewDelhi.*
- *Jain.(2002).SportsSociology.HealSahetyKendrePublishers.*
- *JayCoakley.(2001).SportsinSociety-IssuesandControversiesinInternationalEducation.Mc-CrawSeventhEd*
- *JohnDLauther(2000).PsychologyofCoaching.PrenticceHallInc.,NewJersy.*
- *MiroslawVauks&BryantCratty(1999). Psychology and the Superior Athlete. TheMacmillan,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

- *FairPlayinSport SigmundLoland:2006*
- *EffectiveLeadershipinAdventureProgramming,SimonPriest,MichaelA.Gass:2005*
- *OutdoorLeadershipTheoryandPracticeBruceMartin,ChristineCashel,MarkWagstaff,MayBreuning:2006*
- *PerformanceLeadershipFrankBuytendijk:2009*
- *BrilliantLeaderSimonCooper:2010*
- *SportAdministrationManualInternationalOlympicCommitte*

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“t” test, chisquare

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).ResearchinEducation,PrenticeHall,Inc,NewJersey.*
- *Clark,D.H.(1999).ResearchProbleminPhysicalEducation,IIedition.PrenticeHall,Inc.,EaglewoodCliffs.*
- *Jerry, R Thomas.&Jack,K Nelson. (2000).Research Methods in PhysicalActivities.HumanKinetics,Illonosis.*
- *Kamlesh,M.L.(1999).ResearchMethodologyinPhysicalEducationandSports.KSKPublishers,NewDelhi.*
- *Rothstain,A.(1985).ResearchDesignandStatisticsforPhysicalEducation.Prentice Hall,Inc.,EnglewoodCliffs.*
- *Sivarama Krishnan, S. (2006).Statistics for Physical Education.FriendsPublication,Delhi.*
- *Thirumalaisamy,(1998).Statistics in Physical Education.SenthilkumarPublications,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

- AmitaBhardwaj.(2003).*NewMediaofEducationalPlanning,*SarupofSons,NewDelhi
- Bhatia and Bhatia (1959). *ThePrinciples and Methods ofTeaching*.DoabaHouse,NewDelhi.
- EssentialsofEducationalTechnology,MadanLal,AnmolPublications
- Sampath, A. Pannirselvam and S. Santhanam. (1981).*Introduction toEducationalTechnology*.SterlingPublishersPvt.Ltd.,NewDelhi
- Kochar,S.K.(1982).*Methodsand TechniquesofTeaching*.,SterlingPublishersPvt.Ltd.,NewDelhi,Jalandhar.
- Kozman, Cassidy andkJackson.(1952).*Methods in Physical Education*. W.B.SaundersCompany,PhiladelphiaandLondon

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 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-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, BasicGroundstrokes-
Forehanddrive,Backhanddrive,Basicservice,BasicVolley,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

30Hours

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

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. Participateinco-curricularandextracurricularactivitiesorganizedinthe 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 in culcate 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 per iodization'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).DrugEducationHandbookonDrugAbuseinSports.SportsAuthorityofIndia,Delhi.*
- *Bunn,J.N.(1998).ScientificPrinciplesofCoaching.PrenticeHallInc.,EngleWoodCliffs,NewJersey.*
- *Cart,E. Klafs& Daniel, D. Arnheim(1999).Modern Principles of AthleticTraining.C.V.MosphyCompany,St.Louis.*
- *Daniel,D.Arnheim(1991).PrinciplesofAthleticTraning.MosbyYearBook,St.Louis.*
- *David,R.Mottram (1996).DrugsinSport.SchoolofPharmacy,JohnMooreUniversity,Liverpool*
- *Gary,T.Moran(1997).CrossTrainingforSports.HumanKinetics,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

- *Christopher,M.Norris.(1993).SportsInjuresDiagnosisandManagementforPhysiotherapists.ThomsonLithoLtd.,EastKilbride.*
- *James,A.Gould&GeorgeJ.Davies.(1985).PhysicalTherapy.C.V.MosbyCompany,Toronto.*
- *Morris,B.Million(1984).SportsInjuriesandAthleticProblem.SurjeetPublication,New Delhi.*
- *Pande.(1998).SportsMedicine.KhelShityaKendra,NewDelhi.*
- *TheEncyclopediaofSportsMedicine.(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, aasna, 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, dhati, 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 ReadingsofYoga.MotilalBansaridassPublishers(P)Ltd., London.*
- *Gore (1990).Anatomy and Physiology of Yogac Practices. KanchanPrakashan, Lonavata.*
- *Purperhart,H.(2004).TheYogaAdventureforChildren.AHunterHouse book, Netherlands.*
- *Iyengar,B.K.S.(2000).LightonYoga.HarperCollinsPublishers, NewDelhi.*
- *Karbelkar,N.V.(1993).PatanjalYogasutraBhashya(MarathiEdition).Hanuman VyayamPrasarakMandal.*

Course Name: Olympic Movement (Discipline Elective-III)
CourseCode: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 **09Hours**

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 **10Hours**

Modern Olympic Games:
Significance of Olympic Ideals, Olympic Rings, Olympic Flag, Olympic Protocol for member countries, Olympic motto, Olympic Code of Ethics, Olympisminaction, Sports for All

UNIT-III **14Hours**

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

UNIT-IV **12Hours**

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).Magictreehousefacttracker:ancientgreece and theolympics: a nonfictioncompanion to magic tree house: hour of the Olympics. NewYork:RandomHouseBooksforYoungReaders*
- *Burbank,J. M.,Andranovich,G.D.&HeyingBoulder,C.H.(2001).Olympicdreams:theimpactof mega-eventsonlocalpolitics:LynneRienner*

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 **14Hours**

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 **08Hours**

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 **13Hours**

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,Maintenancepolicy,preventivemaintenance,correctivemaintenance,recordandregisterformaintenance

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).RoutledgeHandbookofSportsTechnologyandEngineeringRoutledge.*
- *SteveHake.(1996).TheEngineeringofSport.CRCPress.*
- *YoulinHong.(2013)RoutledgeHandbookofErgonomicsinSportandExerciseRoutledge.*
- *JenkinsM.(2003).MaterialsinSportsEquipment,VolumeI.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 tomaintainorimprovefitnesslevels,Cardiorespiratoryactivitiesincludingi.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

- *DavidK.Miller&T.EarlAllen(1989).Fitness,Alifetimecommitment.SurjeetPublication,Delhi.*
- *DificoreJudy(1998).Thecompleteguidetothepostnatalfitness,A&CBlackPublishers Ltd.,London.*
- *Dr.A.K.Uppal(1990).PhysicalFitness.FriendsPublications,India,*
- *Elizabeth&Kenday(1986).Sportsfitnessforwomen.B.T.BatsfordsLtd,London.*
- *EmilyR.Foster,KarynHartiger&KatherineA.Smith(2002).FitnessFun.HumanKineticsPublishers*
- *Lawrence,Debbie(1999).ExercisetoMusic.A&CBlackPublishersLtd.,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 **10Hours**

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. Adapted Physical Education in the Mainstream. (4th Edition) Love Publishing Company.*
- *Houner, L.D. Integrated Physical Education- A guide for the elementary classroom teacher*
- *Winnick, J. P. (2005). Adapted Physical Education and Sports. Human Kinetics (4th Edition).*
- *Pangrazi, R.P. and Dauer, V. P. Dynamics Physic*

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 **09Hours**

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 **10Hours**

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

UNIT- III **12Hours**

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 **14Hours**

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

Transaction Mode

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching,

Self-Learning, Collaborative Learning and Cooperative Learning
Suggested Readings

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

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

Course Name: Track and Field-III (Skill Based)
CourseCode: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)
Groundmarking/SectorMarkingInterpretationo
fRulesanddutiesofofficials

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)
CourseCode: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 supervised by the faculty members and experts who would discuss the merits and demeritsoftheconcernedlessonandguidethemforthefuture,Intheselessons,thedurationshouldslowlyincreaseandallthepartsofthelessoncoveredprogressively.

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 **14Hour**

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

- *M.L.Kamlesh.ManagementConceptsinPhysicalEducationandSport(2ndrevisedandupdateded.);NewDelhi;KhelSahityaKendra,(2016)*
- *P. Cherlladurai. Sport Management - MacroPerspectives;London,Ontario(Canada);SportsDynamics(1985)*
- *Allen,L.A.Management&Organization.KogakushaCo.Tokyo,1988*
- *Hert,Renis,NewPatternsofManagement,McGrawHill,1961.*
- *Sandhu,K.SportsDynamics:Psychology,SociologyandManagementSivia,G.S.SportsManagementinUniversities*

Course Name: Anatomy and Physiology
CourseCode:BPD406

L	T	P	Cr
4	0	0	4

TotalHours:60

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

1. Learnaboutthestructuralorganizationofthehumanbodyanditsfunction ing.
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 **14Hours**

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 **17Hours**

Systems of Human Body:
Blood and circulatory system: Constituents of blood and their function, Bloodgroupsandbloodtransfusion,clottingofblood,thestructureoftheheart-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

SuggestedReadings

- *Gupta,M.,&Gupta,M.C.(1980).BodyandAnatomicalScience.Guyton,A.C.(1996),Text bookofMedicalPhysiology,9theditionPhiladelphia.*
- *Moorthy,A.M.(2014).AnatomyPhysiologyandHealthEducation.Karaikudi:Madalaya mPublicationsMorehouse*

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 Bacoon, 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 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, Neelkamal publication, Hyderabad,*
- *Kamlesh, M.L. (2002) –Sociological Foundation of Physical Education, Metropolitan Book co. Pvt. Ltd., Delhi,*
- *Pandey, R.S.(1991) Philosophical & Sociological Foundation of Education,*

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.

UNITIV **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:

- *Michelle Sutton-Kerchner(2019)http://fitnessandwellnessnews.com/healthy-stress-management/*
- *MuktibodhanandaSwami (1998)HathaYogaPradipika,TheYogaPublication:Bihar.*
- *NanetteE.Tummers(2013)StressManagement:AWellnessApproach,HumanKinetics*
- *RujutaDiwekar(2009) Don't Lose Your Mind, Lose Your Weight, RandomHouseIndia:Mumbai.*
- *DavidK.Miller&T.EarlAllen,Fitness,Alifetimecommitment,SurjeetPublication Delhi1989.*
- *DificoreJudy,thecompleteguidetothepostnatalfitness,A&CBlackPublishersLtd.35Bedfordrow,London(1998)*
- *Dr.A.K.Uppal,PhysicalFitness,FriendsPublications(India),1992.WarnerW.KOeger&SharonA.Hoeger,FitnessandWellness,MortonPublishingCompany,1990.*
- *Elizabeth & Ken day, Sports fitness for women, B.T Batsford Ltd, London,1986.*
- *Emily R.Foster, KarynHartiger& Katherine A Smith, Fitness Fun,Human KineticsPublishers2002.*
- *Lawrence, Debbie, Exercise to Music. A & C Black Publishers Ltd 37, SoheSquare,London1999.Robert Malt.90 day fitness plan, D.K. PublishingInc.95.M*

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

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. 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 ClinEndocrinolMetab*
- *2027-2034Butryn, 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 ObstetGynecol, 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*
- *Bates M. (2008) Health Fitness Management (2nd Ed.) USA: Human Kinetics 101*
- *Fink, H.H., Burgoon,L.A., &Mikesky, A.E. (2006). Practical Applications in Sports Nutrition Canada : Jones and Bartlett Publishers*
- *Lancaster S. &Teodoressu, R. (2008). Athletic Fitness for Kids USA: Human Kinetics Martin Estwood (2005) – Principle of human nutrition, Atlantic publication, New Delhi*
- *Michael J. Gibney (2002) – Human Nutrition, Atlantic publication, New Delhi*

Course Name: 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 yogaasanas 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: jalendrabandha,jihvabandha,uddiyanabandha,mulabandha

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, andon 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

60**Hours**

Students will organize project meet