Shree H. V. P. Mandal's

Degree College of Physical Education,

Amravati.

(An Autonomous College)



CURRICULUM SCHEME AND SYLLABUS

OF

BACHELOR OF PHYSICAL EDUCATION (BPED)

(Credit Based Semester Pattern)

Program Code: BPED

Introduced from the Session 2015-2016

Shree H. V. P. Mandal's Degree College of Physical Education, Amravati (Multi Faculty Autonomous College) Department of Physical Education Programme Outcome (PO) and Programme Specific Outcomes (PSO)

Programme – B.P.ED

Programme Outcomes :- Define learning outcomes for **Bachelor Physical Education** which Encourages a holistic approach based on a socio-ecological perspective. promote greater integration and balance between the social and physical sciences . contextualize physical education with a set of attitudes and values that signify the importance of movement as a valued human practice . centralize and acknowledge that the individual, in his /her search for personal meaning, once Educated in Health and Physical Education, would be able to make positive contributions to the Enhancement of Society .Promote the learning of new skills . Enhance, extend, inform and critique the deliberate use of exercise, play, sport and other forms of physical activity within and individual and societal context.

Programme Specific Outcome:-

Make a unique contribution to balanced development and living. Movement being essential to be a human .Learning focused on movement and students need to be engaged in it. a medium for developing skills across diverse areas of endeavor . Fostering a pedagogy based around critical thought and action.

Semester – I

Theory Courses

15 BPEd101 HISTORY, PRINCIPLES AND FOUNDATIONS OF PHYSICAL EDUCATION

Unit – 1: Introduction

- Meaning, Definition and Scope of Physical Education
- Aims and Objectives of Physical Education
- Importance of Physical Education in present era.
- Misconceptions about Physical Education.
- Relationship of Physical Education with General Education.
- Physical Education as an Art and Science.

Unit- 2 – Historical Development of Physical Education in India

- Indus Valley Civilization Period. (3250 BC 2500 BC)
- Vedic Period (2500 BC 600 BC)
- Early Hindu Period (600 BC 320 AD) and Later Hindu Period (320 AD 1000 AD)
- Medieval Period (1000 AD 1757 AD)
- British Period (Before 1947)
- Physical Education in India (After 1947)
- Contribution of Akhadas and Vyayamshals
- Y.M.C.A. and its contributions.

Unit- 3- Foundation of Physical Education

- Philosophical foundation Meaning and definition of Philosophy
- Idealism, Pragmatism, Naturalism, Realism, Humanism, Existentialism and Indian 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-4- Principles of Physical Education

- Biological Principle
 - Growth and Development
 - Age and Gender characteristics
 - Body Types
 - Anthropometric differences
- Psychological Principle
 - Learning types, Learning curve
 - Laws and principles of learning

- Attitude, Interest, Cognition, Emotions and Sentiments
- Sociological Principle
 - Society and Culture
 - Social acceptance and recognition
 - Leadership
 - Social integration and cohesiveness

References:

- 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.(Maharashtra)
- Mohan, V. M. (1969). Principles of Physical Education. Delhi: Metropolitan Book Dep.
- Nixon, E. E. & Cozen, F.W. (1969). *An introduction to Physical Education*. Philadelphia: W.B. Saunders Co.
- Obertuffer, Delbert (1970) Physical Education. New York: Harper & Brothers Publisher.
- Sharman, J. R. (1964). Introduction to Physical Education. New York: A.S. Barnes & Co.
- William, J. F. (1964). *The Principles of Physical Education*. Philadelphia: W.B. Saunders Co.

Course Outcome :-

- ✤ To gain the knowledge of physical education.
- ✤ To understand the historical perspectives of physical education in India.
- ✤ To understand the various isms to become familiar with Indian philosophy.
- ✤ To equip with the ideas of Fitness Promotion.

15 BPEd102 ANATOMY AND PHYSIOLOGY OF EXERCISE

Unit – 1 Introduction

- Meaning, Need & Importance of Anatomy, Physiology and Exercise Physiology
- Cell and Tissue- Structure, types & functions.
- Different systems
- Muscular System- types and functions
- Skeletal system types and functions
- Effect of Exercise on Muscular and Skeletal System.

Unit – II Cardio – respiratory system & Digestive System

- Structure, Functions and mechanism of Circulatory system.
- Blood- Constituent, Functions and Blood Groups.
- Respiratory Systems- Organs and mechanism, Various Respiratory Capacities.
- Effect of exercise on Cardio-respiratory System.

• Digestive System – Anatomy and Physiology of Digestive system .

Unit – III Nervous, Endocrine and Excretory System

- Central Nervous System
- Peripheral Nervous System
- Structure and Functions of Autonomic Nervous System
- Endocrine Glands- Classification and functions of harmones.
- Excretory system- Anatomy of Urinary system, Functions of Kidney
- Effect of Exercise on Nervous, Endocrine and Excretory systems

Unit- IV Energy dynamics and Physiology of Muscular contraction

- Energy Meaning, production and uses
- Types and transformation of energy, Biological energy cycle
- ATP Structure and functions
- Sources of muscular energy ATP- PC system, Anaerobic system, Aerobic glycolysis, Krebs cycle and Electron Transport System.
- Types of muscle Striated, Non striated, Voluntary, Involuntary
- Characteristics of skeletal muscles
- Microscopic structure of muscle fiber
- Physiological mechanism of muscle contraction Sliding Filament Theory
- Muscle fatigue Causes, symptoms and recovery
- Second wind and Oxygen debt.

References:

- D. (1979). A Christine, M. D., (1999). *Physiology of Sports and Exercise*.USA: Human Kinetics.
- Conley, M. (2000). *Bioenergetics of Exercise Training*. In T.R. Baechle, & R.W. Earle, (Eds.), Essentials of Strength Training and Conditioning (pp. 73-90). Champaign, IL: Human Kinetics.
- David, R. M. (2005). Drugs in Sports, (4th Ed). Routledge Taylor and Francis Group.
- Gupta, A. P. (2010). Anatomy and Physiology. Agra: SumitPrakashan.
- Gupta, M. and Gupta, M. C. (1980). *Body and Anatomical Science*. Delhi: Swaran Printing Press.
- Guyton, A.C. (1996). Textbook of Medical Physiology, 9th edition. Philadelphia: W.B. Saunders.
- Hunter, M. *dictionary for physical educators*. In H. M. Borrow & R. McGee, (Eds.), A Practical approach to measurement in Physical Education (pp. 573-74). Philadelphia: Lea & Febiger.
- Karpovich, P. V. (n.d.). *Physiology of Muscular Activity*. London: W.B. Saunders Co.
- Lamb, G. S. (1982). Essentials of Exercise Physiology. Delhi: Surjeet Publication.
- Moorthy, A. M. (2014). *Anatomy, Physiology and Health Education*. Karaikudi: Madalayam Publications.
- Morehouse, L. E. & Miller, J. (1967). *Physiology of Exercise*. St. Louis: The C.V. Mosby Co.

- Pearce, E. C. (1962). Anatomy and Physiology for Nurses. London: Faber & Faber Ltd.
- Sharma, R. D. (1979). *Health and Physical Education*, Gupta Prakashan.
- Singh, S. (1979). Anatomy and Physiology and Health Education. Ropar: Jeet Publications.

- ◆ To gain the knowledge of Organization of the human body and its regulation.
- ✤ To understand the support and movement of systems of the body.
- ✤ To understand the human body and its function.
- ✤ To understand and analyze the structural aspect of systems of the body.
- To understand the concept of fundamental of human body organs.
- ✤ To understand and analyze the functional aspects of Human body.

15 BPEd103 HEALTH EDUCATION, FIRST AID AND REHABILITATION OF SPORTS INJURIES

Unit – I Health Education

- Concept, Dimensions, Spectrum and Determinants of Health
- Definition of Health, Health Education, Health Instruction, Health Supervision
- Aim, objectives and Principles of Health Education
- Health Service and Guidance, Instruction in Personal Hygiene

Unit – II Health Problems in India

- Communicable and Non Communicable Diseases
- Obesity, Malnutrition, Adulteration in food, EnvironmentalPollution,Population Explosion
- Personal and Environmental hygiene in schools
- Objectives of School Health Service, Role of Health Education in schools
- Health Services Care of Skin, Nails, Eye, Nutritional Service, Health Appraisal, Health Record, Healthful School Environment.

Unit – III First Aid and Sports Injuries

- Need and importance of First Aid, First Aid Kit.
- Quality and Qualification of First Aider.
- Principles of First Aid.
- Sports Injuries Types, Symptoms and Treatment.
- Emergency care
- Measures of injury prevention in Sports

Unit – IVRehabilitation of Sports Injuries

- Rehabilitation meaning, definition and scope.
- Rehabilitation of athletic injuries.
- Passive exercise: meaning, types, effects
- Active exercise: meaning, types, effects
- Assisted exercise: meaning, types, effects
- Resisted exercise: meaning, types, effects
- Stretching exercise: meaning, types, effects

References:

- Frank, H. &Walter, H., (1976). *Turners school health education*. Saint Louis: The C.V. Mosby Company.
- Nemir, A. (n.d.). The school health education. New York:Harper and Brothers.
- Hirlekar, P., SwasthaVidnyan? (Details needed.)

Course Outcome :-

- To understand the nature and importance of Health Education in Physical Education and Sports.
- To gain knowledge regarding the medical problems of athletes and its rehabilitation.
- ✤ To acquire knowledge regarding sports injuries and their management.
- ✤ To gain knowledge regarding First Aid .
- ✤ To understand medical problems and its rehabilitation.

15 BPEd104 MANAGEMENT IN PHYSICAL EDUCATION AND SPORTS

Unit – I: Introduction

- Brief introduction of Sports Management (Meaning, Definition, Purpose and Scope)
- Meaning and importance of Organization and Administration in Physical Education
- Essential Skills of Sports Management
- Qualification and Responsibilities of Physical Education Teacher and Pupil Leader
- Program Planning: Time table Management, Meaning, Importance, Principles of Program Planning in Physical Education.
- Factors affecting Time Table

Unit- II: Office Management, Record, Register & Budget

- Office Management: Meaning, definition, functions and kinds of office management
- Records and Registers: Maintenance of Attendance Register, Stock Register, Cash Register, Physical Efficiency Record, Medical Examination Record.

- Budget- Meaning and Importance
- Criteria of a good Budget, Sources of Income, Expenditure, Preparation of Budget.
- Principles and Steps of Budgetingand its monitoring

Unit-III: Facilities&Supervision

- Facilities and equipment management: Types of facilities: Infrastructure-indoor, out door, academic & administrative blocks, research wing, library etc
- Care of school building, Gymnasium, swimming pool, Play fields, Play grounds
- Equipment: Need, importance, purchase, care and maintenance.
- Supervision Meaning, Definition, objectives, Principles, Quality of the Supervisor, Technique of Supervision.
- Sports Managment System in Schools, Colleges and Universities
- Track and Field Characteristics, Layout- Marking of Track and Field

Unit-IV: Competition Organization

- Importance of Tournament
- Types of Tournament and its organization structure Knock-out Tournaments, League or Round Robin Tournaments, Combination Tournament and Challenge Tournament.
- Organization structure of Athletic Meet
- Sports Event- Intramurals & Extramural Tournament planning
- CommonProblems in School Sportsand their remedies

References:

- Broyles, F. J. & Rober, H. D. (1979). *Administration of sports, Athletic programme: A Managerial Approach*. New York: Prentice hall Inc.
- Bucher, C. A. (1983). *Administration of Physical Education and Athletic programme*.St. Louis: The C.V. Hosby Co.
- Earl, F. Z,& Gary, W. B. (1963). *Management competency development in sports and physical education*. Philadelphia: W. Lea and Febiger.
- Kozman, H.C. Cassidly, R. & Jackson, C. (1960).*Methods in Physical Education*. London: W.B. Saunders Co.
- Pandey, L.K. (1977). *Methods in Physical Education*. Delhi: Metropolitan Book Depo.
- Voltmer, E. F. &Esslinger, A. A. (1979). *The organization and administration of Physical Education*. New York: Prentice Hall Inc.

- ✤ To understand the concept and to equip with the essential skills of sports management.
- ✤ To understand the qualities and to equip with competencies required for the sports manager.
- ✤ To gain the knowledge of the basic concept of planning.

- ✤ To gain the knowledge of the concept of leadership and it's known forms.
- To understand the Organization and Administration of Sports Programs.
- To let be familiar with the Preparation of the financial proposals for physical education & sports in Schools/Colleges/Universities.
 - ◆ To be equipped with the skill of Organization, designing and evaluating the sports events.

Semester – II Theory Courses

15 BPEd 109 YOGA EDUCATION

Unit – I Introduction and History

- Meaning, Definition and Concept and misconception about Yoga
- Aims and Objectives of Yoga
- Need and Importance of Yoga in Physical Education and Sports
- Historical Background of Yoga in brief

Unit – II Ancient Texts on Yoga

- Patanjali Yoga Sutra: General Consideration Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi
- Introduction to Hathayogic Texts: Hatapradipika and GherandSamhita
- Bhagwad- Gita : Gnyana Yoga, Karma Yoga and Bhakti Yoga (Only central ideas)

Unit – III Yogic Practices

- Objectives, Principles and Mechanism of Asanas and effects of their practices on various systems of the body.
- Objectives Principles and Mechanism of Shatkriyas and effects of their practices on various system of the body
- Objectives Principles and Mechanism of Bandhas& Mudras and their effects describe in Hathayogic Texts
- Objectives Principles and Mechanism of Pranayama and effects of their practices on various systems of the body and on mind

Unit – IV Yoga and Health

• Meaning and Definition of health

- Concept of health in Yoga
- Characteristics of healthy individual, factors influencing health
- Role of Yoga in maintaining good health
- Yoga for prevention, cure and Rehabilitation
- Mental Health Meaning and importance
- Yoga for Stress Management
- Research in Yoga with special reference to health

References :

- A.N. Khodaskar -Yoga SwasthyaKunji (Brihan Maharashtra Yoga Parishad), 2006
- N. V. Karbelkar–Patanjal Yoga Bhashya (Hanuman VyayamPrasarakMandal, Amravati)
- P. V. Karambelkar- Patanjala Yoga Sutra, Kaivalyadhama , Lonavala
- M. L. Gharote-Hathapradipika, Yoga Institute, Lonavala
- Swami Digambarji&M.L..Gharote- GherandSamhita,Lonavala
- Swami Kuvalayanand- Asana, Kaivalyadhama , Lonavala
- Swami Kuvalayanand- Pranayama, Kaivalyadhama, Lonavala
- Jayadeo Singh Shiva Sutra, MotilalBanarasidas, Delhi
- Swami SatyanandSarswati- Asana Pranayama Bandha Mudra, Bihar School of Yoga, Munger
- RonghePrafulla N. Physiology of Yoga, Amravati
- A.N. Khodaskar, V. A. Khodaskar Yoga ArogyamSukhaSampada, Amravati
- H. R. Nagendra and Nagarathna New perspective in stress management, Bangaluru
- L. S. Chawla- Pranayam, Amravati
- R. H. Tiwari Prachin Bharat Main SharirikShikshaDarshan, Amravati
- M. L. Gharote Applied Yoga, Lonavala
- R. S. Bhogal- Yoga and Mental health and beyond, Kaivalyadhama, Lonavala, 2010
- M. M. Gore- Anatomy and Physiology of Yogic Practices, Lonavala, 1990
- Swami Kuvalyanand and Dr. Vinekar Yoga Therapy : its basic principles and method, Central health education and bureau, Govt. of India, New Delhi, 1963
- Yoga periodicals and journals

- ✤ To understand and to be equipped with the Concepts of Yogic practices and Asana.
- ◆ To be Equipped with the knowledge of Upanisadas and importance in one's life.
- ◆ To be Equipped with the knowledge of Yoga sutra, Astang Yoga and Hatayoga.
- To become familiar Classify and Identify the Yogic practices' and Asana's values and apply the same to the society.

15 BPEd- 110 EDUCATIONAL TECHNOLOGY AND METHODS OF TEACHING IN PHYSICAL EDUCATION

Unit – I Introduction

- Education and Education Technology- Meaning and Definitions
- Types of Education- Formal, Informal and Non- Formal Education.
- Educative Process
- Importance of Devices and Methods of Teaching.

Unit – II Teaching Techniques

- Teaching Techniques Lecture method, Command method, Demonstration method, Imitation method, Project method.
- Teaching Procedure Whole method, Whole Part Whole method, Part Whole method.
- Presentation Technique Personal and Technical preparation
- Command- Meaning, Types and its uses in different situations.

Unit – III Teaching Aids

- Teaching Aids Meaning, Importance and Criteria for selecting teaching aids.
- Types of Teaching aids Audio aids, Visual aids, Audio Visual aids, Verbal, Chalk Board, Charts, Model, Slide & LCD projector, Motion pictures, Computers, Laptops,etc
- Team Teaching Meaning, Principles and advantage of team teaching.
- Difference between Teaching Methods and Teaching Aids.

Unit – IV Lesson Planning and Teaching Innovations

- Lesson Planning Meaning, Type and Principles of Lesson Plan.
- General and specific lesson plan.
- Micro Teaching Meaning, Types and Steps of Micro Teaching.
- Simulation Teaching Meaning, Types and Steps of Simulation Teaching.
- Use of teaching aids in class room and outdoor lessons.
- Factors affecting execution of teaching per lesson

Reference:

- Bhardwaj, A. (2003). *New media of educational planning*. New Delhi: Sarup and Sons.
- Bhatia, & Bhatia, (1959). *The principles and methods of teaching*. New Delhi: Doaba House.
- Kochar, S.K. (1982). *Methods and techniques of teaching*.New Delhi: Sterling Publishers Pvt. Ltd.

- R. H. Tiwari Prachin Bharat Me SharirikShikshanDarshan, Amravati
- R. H. Tiwari Saphal Path Niyojan, H.V.P.MandalPublication, Amravati
- Sampath, K.Pannirselvam, A. &Santhanam, S. (1981). *Introduction to educational technology*. New Delhi: Sterling Publishers Pvt. Ltd.
- Walia, J.S. (1999). *Principles and methods of education*. Jullandhar: Paul Publishers.

- To understand the importance of Educational Technology for Teaching lessons of physical education.
- To understand the importance and types of teaching methods and techniques with its devices to teach various aspects Physical education skillfully.
- ✤ To acquire information on current directions in special Teaching Aids.
- To be sensitive to the proficiency in construction of Lesson Plans for various physical education activities.
- To gain the knowledge of classifying the types of presentation-techniques and technical preparations required for physical education lessons.
- ✤ To understand the principles of class management and factors affecting class management.
- To acquire the skill of utilization of various teaching aids for conduct of physical education program effectively.

15 BPEd -111 EDUCATIONAL AND SPORTS PSYCHOLOGY

Unit - I: Introduction

- Meaning, Importance and Scope of Educational and Sports Psychology
- General characteristics of Various Stages of Growth and Development
- Types and nature of Individual Differences; Factors responsible -Heredity andEnvironment

Unit - II: Learning and Personality

- Nature of Learning, Theories of Learning, Laws of Learning,
- Learning Curve, Plateau in Learning; & Transfer of Training
- Meaning and Definition of Personality, Characteristics of Personality
- Dimension of Personality, Factors of affecting Personality, Personality and Sports Performance
- Importance of Ideals & Role Models

Unit - III: Motivation, Agression, Anxiety and Stress

- Meaning, Nature, Importance of Motivation in Learning.
- Types of Motivation, Factors influencing Motivation.
- Motivational Techniques and its impact on Sports Performance.
- Aggression and its impact on Sports Performance.
- Meaning and nature of anxiety, Kinds of anxiety.
- Meaning and Nature of Stress; Types of Stress, Stress, Arousal and their effects on Sports Performance

Unit – IV Group Psychology

- Meaning, Importance and Nature of Group and Group Psychology.
- Types of Group and their Characteristics, Group Leader.
- Group Dynamics
- School, Class room and Team as a Group and Their Importance.
- Group Cohesion- Meaning and Importance in Sports and Sports Performance

References:

- Ball, D. W. & Loy, J. W. (1975).*Sport and social order; Contribution to the sociology of sport*.London: Addison Wesley Publishing Co., Inc.
- Blair, J.& Simpson, R.(1962). *Educational psychology*, New York:McMillan Co.
- Cratty, B. J.(1968). *Psychology and physical activity*. Eaglewood Cliffs. Prentice Hall.
- Kamlesh, M.L. (1998). *Psychology in physical education and sport*. New Delhi:Metropolitan Book Co.
- Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1978). **Sport and social system**. London: Addison Wesley Publishing Company Inc.
- Mathur, S.S., (1962). *Educational psychology*. Agra. VinodPustakMandir.
- Skinnner, C. E., (1984.). *Education psychology*. New Delhi: Prentice Hall of India.
- William, F. O.&Meyer, F. N. (1979). *A handbook of sociology*. New Delhi: Eurasia Publishing House Pvt Ltd.
- P.D. Pathak, 2000 ShikshaManovidnyan, Agra, VinodPustakMandir
- S. K. Mangal (2005) *ShikshaManovidnyan*, Ludhiana, Tandan Publication books markets.

- To develop an understanding of the nature, scope & methods of psychology of education, physical education & sports.
- To understand the nature, steps and factor facilitating and obstructing learning.
- To develop an understanding of the intelligence, creativity & the role of the teacher in fostering them.

- To develop an understanding of the concept of individual difference and its importance in education, physical education and sports.
- To develop an understanding of the concept of personality, factors affecting personality development and the role of teacher in promoting mental health of students.

15 BPEd - 112 FITNESS MANAGEMENT

Unit – I Concept of Physical Education and Fitness

- Definition, Physiological, Psychological and Sociological objectives of Fitness and Wellness
- Fitness Types of Fitness and Components of Fitness
- Importance and Scope of Fitness and Wellness
- Physical Activity and Health Benefits
- Role of Execise in Fitness and Wellness

Unit – II Principles of Exercise Program

- Meaning of Fitness Development Aerobic and Anaerobic Exercises
- Exercises and Heart rate Zones for various Aerobic Exercise Intensities
- Concept of free weight Vs Machine, Sets and Repetition etc
- Concept of designing different Fitness Training Program for different age groups

Unit – III Introduction to Sports Nutrition

- Meaning and Definition of Sports Nutrition
- Role of nutrition in sports, Recommended Dietary Allowances for Sports persons.
- Carbohydrates, Protein, Fat, Vitamins, Minerals, Water Meaning, Classification and their Functions, Components of Balanced diet.
- Role of Hydration during Exercise, Water Balance, Nutrition during exercise daily caloric requirement and expenditure.

Unit – IV Nutrition and Weight Management

- Concept of BMI (Body Mass Index), Obesity and its hazard, Dieting versus Exercise for weight control, Common Myths about Weight Loss
- Health Risks Associated with Obesity, Causes and Solutions for Overcoming Obesity.
- Nutrition Daily calorie intake and expenditure, Determination of desirable Body Weight
- Weight Management Program for SportsChild, Role of Diet and Exercise in Weight Management, Diet Plan and Exercise Schedule for Weight Gain and Loss

References:

• Bessesen, D. H. (2008). Update on obesity. J ClinEndocrinol Metab.93(6), 2027-2034

- Butryn, M.L., Phelan, S., &Hill, J. O.(2007). Consistent self-monitoring of weight: a key component of successful weight loss maintenance. *Obesity(Silver Spring)*. 15(12), 3091-3096.
- Giam, C.K &The, K.C. (1994). Sport medicine exercise and fitness. Singapore: P.G. Medical Book.
- Mcglynn, G., (1993). *Dynamics of fitness*. Madison: W.C.B Brown. Sharkey, B. J.(1990). *Physiology of fitness*, Human Kinetics Book.
- Nutritive value of Indian food:- National Institute of Nutrition (NIN)
- Nutrition and dietetics with Indian case studies : Shubhangini A. Joshi, Mc-Grow Hill Publication

- Understand the modern concept of Fitness and Wellness.
- Employ the knowledge about concept of holistic health through fitness and wellness
- Orient students toward the approach of positive life style.
- Develop competencies for profile development, exercise guidelines adherence.
- Apply the holistic concept of health and wellness.
- Realize and apply the fitness and wellness management techniques.
- Design different fitness training program for different age group.
- Explain common injuries and their management

Semester – III

15 BPEd-201 SPORTS TRAINING

Unit – I Introduction to Sports Training

- Meaning and Definition of Sports Training
- Aim and Objectives of Sports Training
- Principles of Sports Training
- System of Sports Training Basic Performance, Good Performance and High Performance Training
- Talent Identification and Nurturing.

Unit – II Methods of Training for the development of Fitness components

- Strength- Means and Methods of Strength Development
- Speed Means and Methods of Speed Development
- Endurance Means and Methods of Endurance Development

- Coordination Means and Methods of Coordination Development
- Flexibility Means and Methods of Flexibility Development

Unit – III Training Process

- Training Load- Definition and Types of Training Load
- Principles of Intensity and Volume of Stimulus
- Meaning of the terms; Skill, Technique, Style, Strategy and Tactics.
- Technical Training Meaning and Methods of Technical Training
- Tactical Training Meaning and Methods of Tactical Training
- Overtraining- Its Causes and Symptoms

Unit – IV Training Programming and Planning

- Periodization Meaning and types of Periodization
- Aim and Contents of Periodization- Preparatory, Competition, Transitional etc.
- Training Plan- Micro, Meso, Macro
- Factors influencing Training Programme
- Climatic condition, Diet, Level of Sports Skills, Facilities, Age, Sex etc.

Reference:

- Dick, W. F. (1980). *Sports Training Principles*. London: Lepus Books.
- Jensen, R. C.& Fisher, A.G. (1979). *Scientific Basis of Athletic Conditioning*. Philadelphia: Lea and Febiger, 2ndEdn.
- Matvyew, L.P. (1981). Fundamental of Sports Training. Moscow: Progress Publishers.
- Singh, H. (1984). Sports Training, General Theory and Methods. Patial: NSNIS.
- Uppal, A.K., (1999). Sports Training. New Delhi: Friends Publication.
- Sharma R. K. (2000) Khel Training KeVaigyanikSiddhant, KridaSahityaPrakashan, New Delhi

- ✤ To understand the concept, principles and forms of sports training.
- ✤ To develop Methods of Training for all of the Fitness components
- Technical and Tactical training methods to develop
- To acquaint the students with dimensions and actual markings of different play fields, courts and arenas.
- to Factors Influencing Training Programme

Semester III Theory Courses

15 BPEd- 202 COMPUTER APPLICATIONS IN PHYSICAL EDUCATION

Unit – I: Introduction to Computer

- Meaning, need and importance of Information and Communication Technology (ICT). Application of Computers in Physical Education
- Components of Computer, Input and Output Device
- Application Software used in Physical Education and Sports
- Internet and its uses
- Browsers

Unit – II: MS Word

- Introduction to MS Word
- Creating, Saving and Opening a Document
- Formatting, Editing features Drawing table,
- Page setup, Paragraph alignment, Spelling and Grammar check Printing option, Inserting page number, Graph, Footnote and Notes

Unit – III: MS Excel

- Introduction to MS Excel Creating, Saving and Opening the Spreadsheet
- CreatingFormulas
- Format and Editing Features, AdjustingColumns Width and Row Height Understanding Charts.

Unit – IV: MS Power Point

- Introduction to MS Power Point
- Creating, Saving and Opening a ppt. file
- Format and Editing Features, Slide show, Design, Inserting Slide Number
- Picture,Graph,Table
- Preparation of Power Point presentations

References:

- Irtegov, D. (2004). Operating System Fundamentals. Firewall Media.
- Marilyn, M.& Roberta, B.(n.d.). *Computers in your future*. 2nd edition, India: Prentice Hall.
- Milke, M.(2007). Absolute beginner's guide to computer basics. Pearson Education Asia.

• Sinha, P. K. & Sinha, P. (n.d.). Computer fundamentals. 4th edition, BPB Publication.

Course Outcome :-

- \bigstar To understand the need and importance of Communication Technology (ICT).
- ◆ To gain knowledge of the application of Computer in Physical Education
- ✤ To acquaint the learner with different methods MS Offices .
- To understand Application of Software used in Physical Education and sports

15 BPEd-203 METHODOLOGY OF SPECIAL SUBJECT

Course Outcomes :-

- ✤ To understand the place of Physical Education in school curriculum.
- ✤ To acquaint the learner with different methods of teaching physical activities.
- ✤ To acquaint the students with planning, objectives of different types of lessons.
- To acquaint the learner with organizing and conducting various types of tournaments and athletic meet.
- ◆ To acquaint the learner with the constructions and marking of track and field events.

15 BPEd- 204 PROFESSIONAL PREPARATION AND CURRICULUM DESIGN

UNIT-I Modern Concept of the Curriculum

- Need and importance of Curriculum
- Need and importance of Curriculum Development
- Role of Teachers in Curriculum Development.
- Factors affecting Curriculum Social Factors Personnel Qualifications Climatic Consideration Equipment and Facilities -Time Suitability
- National and Professional Policies, Research Findings

UNIT-IIBasic GuidelinesFor Curriculum Construction

- Focalization
- Socialization
- Individualization
- Sequence and Operation
- Steps in Curriculum Construction
- Types of Curriculum
- Evaluation of Curriculum

UNIT-IIICurriculum-Old And New Concepts, Mechanics of Curriculum Planning.

- Basic Principles of Curriculum Construction.
- New Trends in Curriculum Development
- Role of Teachers in Curriculum Development
- Curriculum of Physical Education in School and Colleges

UNIT-IV Under-Graduate Levelof Professional Preparation.

- Introduction to Professional Preparation: Meaning and Explanation of Profession.
- Nature and objectives of profession preparation in Physical Education and Sports.
- Teaching Practice
- Aims, objectives and significance of professional preparation in Physical Education.
- Internship- Meaning and importance in Physical Education.

Reference:

- Barrow, H. M. (1983). *Man and movement: principles of physical education*. Philadelphia: Lea and Febiger.
- Bucher, C. A. (1986). Foundation of physical education: St. Louis: The C. V. Mosby & Company.
- Cassidy, R. (1986). *Curriculum development in physical education*. New York: Harper & Company.
- Cowell, C.C. & Hazelton, H.W. (1965). *Curriculum designs in physical education*. Englewood Cliffs: N.J. prentice Hall Inc.
- Larson, L.A. (n.d.). *Curriculum foundation in physical education*. Englewood Cliffs: N.J. Prentice Hall Inc.
- Underwood, G. L. (1983). *The physical education curriculum in secondary school: planning and implementation*. England: Taylor and Francis Ltd.
- Willgoose, C.E. (1979). *Curriculum in physical education*. 3rd Ed. Englewood Cliffs.: N.J. Prentice Hall, Inc.
- Wakharkar, D. G., Physical Education and Sports in India

- ◆ To develop an understanding of the Professional Preparation and Curriculum Design
- ✤ To understand the Role of Teachers in Curriculum Development .
- To develop an understanding of the intelligence, creativity & the role of the teacher in fostering them.
- ✤ For Under Graduate Level of Professional preparation .
- For Professional preparation in Physical Education and Sports

Semester-IV

Theory Courses

15 BPEd – 209 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

Unit- I Introduction to Test, Measurement & Evaluation

- Meaning of Test, Measurement & Evaluation in Physical Education
- Need & Importance of Test, Measurement & Evaluation in Physical Education
- Principles of Evaluation
- Inter Relationship among Test, Measurement and Evaluation

Unit- II Criteria; Classification and Administration of test

- Criteria of good Test
- Scientific Authenticity (Validity, Reliability, Objectivity, Standard Norms)
- Type and classification of Test
- Steps in the Administration of Test -
- Advance preparation, Duties during testing, Duties after testing.

Unit- III Motor and Physical Fitness Tests

- AAHPER Youth Fitness Test
- National Physical Fitness Programme
- Indiana Motor Fitness Test
- JCR Test
- Harvard Step Test

Unit- IV Sports Skill Tests

- Lockhart and McPherson Badminton Test
- Johnson Basketball Test
- McDonald Soccer test
- S.A.I Volleyball Test
- S.A.I Hockey Test

References:

- Barrow, H. M., &Mcgee, R. (1997). A practical Approach to Measurement in Physical education. Philadelphia: Lea and Febiger.
- Kansal, D.K. (1996). *Test and Measurement in Sports and Physical Education*. New Delhi: D.V.S. Publications.
- Mathews, D.K., (1973). *Measurement in Physical Education*, Philadelphia: W.B.Sounders Company.
- Phillips, D. A., &Hornak, J. E. (1979). *Measurement and Evaluation in Physical Education*. New York: John Willey and Sons.

- To understand the concept of Measurement, Evaluation and Assessment Procedure in Physical Education.
- ✤ To understand different tests in Physical Education.
- To acquire the knowledge of various tests regarding Physical fitness, motor and healthrelated fitness.
- ✤ To understand various sports skill tests.
- ◆ To understand and application of simple statistical procedures for evaluation.

15 BPEd - 210 KINESIOLOGY

Unit – I Introduction to Kinesiology and Sports Biomechanics

- Meaning and Definition of Kinesiology and Sports Biomechanics
- Importance of Kinesiology and Sports Biomechanics to Physical Education Teacher, Athletes and Sports Coaches.
- Terminology of Fundamental Movements
- Fundamental concepts of following terms Axes and Planes, Centre of Gravity, Line of Gravity

Unit – II Fundamental Concept of Anatomy and Physiology

- Classification of Joints and Muscles
- Types of Muscle Contractions
- Posture Meaning, Types, Postural Deformities and Importance of Good Posture.
- Fundamental Concepts of following Terms- Angle of Pull, All or None Law, Reciprocal Innervation, Neuro-Muscular Coordination

Unit – III Mechanical Concepts

- Force Meaning, Definition, Types and its Application to Sports Activities
- Lever Meaning, Definition, Types and its Application to Human body.
- Newton's Laws of Motion Meaning, Definition and its Application to Sports Activities.
- Projectile Factors Influencing Projectile Trajectory.

Unit – IV Movement and Principles

- What is Efficient Movement? Factors causing Efficient Movement.
- Environmental Factors Influencing Force & Movement
- Principles of Inertia and Equilibrium.
- Principles of Giving & Receiving Impetus to External Objects.

Reference:

- Bunn, J. W. (1972). *Scientific principles of coaching*. Englewood Cliffs, N.J.: Prentice Hall Inc.
- Hay, J. G. & Reid, J. G.(1982).*The anatomical and mechanical basis of human motion*. Englewood Cliffs, N.J.: prentice Hall Inc.

- Hay, J. G. & Reid, J. G.(1988). *Anatomy, mechanics and human motion*. Englewood Cliffs, N.J.: prentice Hall Inc.
- Hay, J. G. (1970). *The biomechanics of sports techniques*. Englewood Cliffs, N.J.: Prentice Hall, Inc.
- Simonian, C.(1911). *Fundamentalsof sport biomechanics*. Englewood Cliffs, N.J.: Prentice Hall Inc.
- Deshpande, S.H.((1995) ManavKriyaVigyan (Hindi), H.V.P.Mandal, Amravati.
- KatherynLuttgens, Holge Deutsch, Nancy Hamilton- Kinesiology-Scientific basis of human motion (8th Edition)
- Cooper Adrion, Glasson- Kinesiology
- Ellen K, Katherine M.B. Biomechanics, A qualitative approach for studying human movement, Second Edition, Mc Milan Company, NewYork.

- ✤ To understand the nature and scope of Kinesiology in Physical Education & Sports.
- ◆ To understand the importance of movement analysis, kinesiological analysis .
- To understand the knowledge regarding antagonistic and agonistic muscles in the movements.
- To gain knowledge of the application of mechanical principles to fundamental skills and sports techniques.
- ✤ To understand basic mathematical problems related to motion, force and levers

15 BPEd - 211 RESEARCH AND STATISTICS IN PHYSICAL EDUCATION

Unit-I Introduction to Research

- Definition of Research
- Need and Importance of Research in Physical Education and Sports.
- Scope of Research in Physical Education & Sports.
- Classification of Research
- Research Problem, Meaning of the Terms, Location and Criteria of Selection of Problem
- Formulation of a Research Problem
- Limitations, Delimitations, Hypothesis and Operational Definitions of the terms

Unit-II Survey of Related Literature

- Need for Surveying Related Literature.
- Literature Sources, Library Reading
- Research Proposal, Meaning and Significance of Research Proposal.
- Preparation of Research Proposal / Project.
- Research Report: A group project is to be undertaken by a small batch of students under the supervision of a teacher, wherein it is expected to survey school facilities of physical education, health assessment programme evaluation, fitness status of the students, staff and other stakeholders etc. and submit the report to the institution.

Unit-III Basics of Statistical Analysis

- Statistics: Meaning, Definition, Nature and Importance
- Class Intervals: Raw Score, Continuous and Discrete Series, Class Distribution, Construction of Tables
- Graphical Presentation of Class Distribution: Histogram, Frequency Polygon, Frequency Curve. Cumulative Frequency Polygon, Ogive, Pie Diagram

Unit- IV Statistical Models in Physical Education and Sports

- Measures of Central Tendency: Mean, Median and Mode-Meaning, Definition, Importance, Advantages, Disadvantages and Calculation from Grouped and Ungrouped Data
- Measures of Variability: Standard Deviation, Quartile Deviation, Mean Deviation and Range, Meaning, importance, computing from grouped and ungrouped Data
- Percentiles and Quartiles: Meaning, Definition, Importance, Computation from grouped and ungrouped Data

References:

- Best, J.W. (1963). *Research in education*. U.S.A.: Prentice Hall.
- Clark, H. H., & Clark, D. H. (1975). *Research Process in Physical Education*. Englewood cliffs, New Jersey: Prentice Hall, Inc.
- Garrett, H.E. (1981). *Statistics in Psychology and Education*. New York: VakilsFeffer and Simon Ltd.
- Oyster, C. K., Hanten, W. P., &Llorens, L. A. (1987). *Introduction to Research:* A Guide for the Health Science Professional. London: J.B. Lippincott Company.
- Thomas, J.R., & Nelson J.K. (2005). *Research method in physical activity*. U.S.A: Champaign, IL: Human Kinetics Books.
- Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2011). Research Method in Physical Activity. U.S.A: Champaign, IL: Human Kinetics Books.
- Verma, J. P. (2000). *A Text Book on Sports Statistics*. Gwalior: Venus Publications. Course Outcome :-
- \bigstar To understand need and Importance of Research in Physical Education and sports .
- To understand the nature and scope of Research and Statistics in Physical Education and sports.
- ✤ To understand Survey of Related Literature and Research Reports .
- To understand basics of Statistical Analysis or problems and related Graphical Presentation of Distribution
- ✤ To prepare Statistical Models in Physical Education and Sports

15 BPEd - 212 OFFICIATING AND COACHING IN SPORTS AND GAMES

Unit- I: Introduction to Officiating and Coaching

- Concept, Importance and principles of officiating and coaching
- Philosophy of Officiating and Coaching
- Duties of Coach- Pre, During and Post Competition
- Responsibilities of a Coach on and off the Field

Unit- II: Qualities and Qualifications of Coach and Official

- Qualities and Qualifications of Coach and Official
- General rules of games and sports
- Eligibility rules of Intercollegiate and Inter-university Tournaments, Preparation of TA, DA bills
- Integrity and values of sports

UNIT-III Theory of Sports and Games

- General Introduction of specialization games and sports

 (Athletics, Badminton, Basketball, Cricket, Football, Gymnastic, Hockey, Handball, Kabaddi, Kho-Kho, Tennis, Volleyball and Yoga)
 Each game or sports to be dealt under the following heads
- Ground Preparation, Dimensions and Marking
- Standard Equipments and their Specifications
- Ethics of sports and sportsmanship

UNIT-IV Advance Training (for particular specialized Games or Sports).

- Concept of Conditioning and warming up.
- Role of weight training in games and sports.
- Teaching of fundamental Skill & their Mastery (Technique, Tactic and Different Phases of Skill Acquisition).
- Recreational and Lead up games
- Strategy Offence and defense, Principles of offence and defense.

References:

- Bunn, J. W. (1968). The art of officiating sports. Englewood cliffs N.J. Prentice Hall.
- Bunn, J. W. (1972). Scientific principles of coaching. Englewood cliffs N. J. Prentice Hall.
- Dyson, G. H. (1963). *The mechanics of athletics*. London: University of London Press Ltd.
- Lawther, J.D. (1965). Psychology of coaching. New York: Pre. Hall.
- Singer, R. N. (1972). Coaching, athletic & psychology. New York: M.C. Graw Hill

- To understand basic concepts & principles of officiating and coaching of different sports.
- To enable the students to understand the rules, regulations and officiating in different sports.
- To acquaint the students with the duties and responsibilities of officials and coaches.
- To acquaint students with dimensions & actual markings of different play fields, courts & arenas.
- To understand the concept, principles and forms of sports training.