DEPARTMENT OF PHYSICAL EDUCATION

SYLLABUS FOR TWO-YEAR B. P. ED. COURSE CHOICE BASED CREDIT SYSTEM



RAJIV GANDHI UNIVERSITY, RONO HILLS, DOIMUKH **Preamble:** Bachelor of Physical Education (B. P. Ed.) two years (Four Semesters Choice Based Credit System) programme is a professional programme meant for preparing teachers of physical education in classes VI to X and for conducting physical education and sports activities in classes XI and XII.

B. P. Ed. programme is designed to integrate the study of childhood, social context of Physical Education, subject knowledge, pedagogical knowledge, aim of Physical Education and communication skills. The programme comprises of compulsory and optional theory as well as practical courses and compulsory school internship.

GOAL OF THE B.P.ED & SPORTS SCIENCES PROGRAMME

To prepare professionally fit teachers of Physical Education & Sports Sciences and academic subjects, who are capable of responding to the changing needs of the Modern Indian Society with the challenges and opportunities available therein.

GENERAL OBJECTIVES OF THE B.P.ED PROGRAMME

- 1. To prepare teachers of Physical Education with broader educational perspective.
- 2. To develop Personal, Professional and Social competencies required in teaching profession.
- 3. To develop potential for planning and organizing Physical Education programmes and activities.
- 4. To empower learners to inspire their students to actively participate in Physical and Yogic Exercises, Games and Sports.
- 5. To enable teachers to develop personality, character, will power, democratic values and positives attitude towards life among their students through Physical Education.
- 6. To make teachers capable of imparting basic knowledge about health, hygiene, nutrition and physical fitness.
- 7. To develop skills and competencies to organize school and community games and sports.
- 8. To cultivate the spirit of sportsmanship, mental and physical alertness, scientific temper and optimism.
- 9. To promote mental health, power of self-decision and self-control, correct judgment and action, emotional stability, respect for other and acceptance of the authority and rules.
- 10. To promote appreciation and interest for indigenous games, sports and yogic practices among learner.
- 11. To create awareness about health and hygiene in the community.

Eligibility

Intake, Eligibility and Admission Procedure as per the NCTE norms and standards

B. P.Ed. Duration of the Course:

The B. P. Ed programme shall be of a duration of two academic years, that of four semesters. However, the students shall be permitted to complete the programme requirements within a

maximum of three years from the date of admission to the programme.

B. P. Ed. The CBCS System:

The Programme shall run on Choice Based Credit System (CBCS). It is an instructional package developed to suit the needs of students, to keep pace with the developments in higher education and the quality assurance expected of it in the light of liberalization and globalization in higher education.

B. P. Ed Course:

The term course usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weight. The course define learning objectives and learning outcomes. The course is designed to comprise Lectures/ tutorials/laboratory work/ field work/ outreach activities/ project work/ vocational training/viva/ seminars/ term papers/assignments/ presentations/ self-study etc. and a combination of some of these.

B. P. Ed. Courses of Programme:

The B. P. Ed. Programme consists of a number of courses, the term 'Course' applied to indicate a logical part of subject matter of the programme and is invariably equivalent to the subject matter of a "paper" in the conventional sense. The following are the various categories of courses for the B.P.Ed. Programme.

- o Theory:
 - Core Course:
 - Elective Course:
- o Practicum:
- Teaching Practices:

B. P. Ed. Semesters:

One academic year is divided into two semesters. Each semester will consist of 17-20 weeks of academic work equivalent to 100 actual teaching days. A minimum of 36 working hours in a week (five or six days a week).

B.P. Ed. Working days:

There shall be at least 200 working days per year exclusive of admission and examination processes etc.

B. P. Ed. Examinations:

- i. Semester examinations for first semester in the month of November /December: for second semester in the month of May / June. A candidate who does not pass the examination in any course(s) shall be permitted to appear in such failed course(s) in the subsequent examinations to be held in November /December or May / June.
- ii. candidate should get enrolled/registered for the first semester examination. If enrollment/registration is not possible owing to shortage of attendance beyond condonation limit / rules prescribed OR belated joining OR on medical grounds, such candidates are not permitted to proceed to the next semester. Such candidates shall redo the semester in the subsequent term of that semester as a regular student; however, a student of first semester shall be admitted in the second semester, if he/she has successfully kept the

term in first semester.

B. P. Ed. Scheme of Evaluation:

1. Internal Assessment : 30 Marks

2. External Assessment : 70 Marks and 50 and 20 marks for Theory and Practical respectively for papers having practicum.

3. Duration of Exam : 3 Hours

4. Pass marks : 40% in Internal and External separately

➤ Out of 30 marks of Internal assessment 20 marks will be awarded on the basis of three Sessional Tests by taking the average of two best Sessional Test and 10 marks will be awarded on the basis of the Sessional Work performed.

For external assessment (written exam) there will be question paper of **70** marks having **5** question of equal value with internal choice.

NB: All other items of related to award of minimum passing marks, degree, semester grade points and all others items leading to award of 2 (Two) Year Bachelor of Physical Education Degree will be governed by NCTE, Regulations, 2014-15 R. B.P. Ed. 1-20.

Details of the Syllabus inclusive of Course papers, total credits, nos. of teaching hours, total marks inclusive both of Internal Assessment and external Assessment for each semester are shown separately:

Semester-I

Part A: Theory									
Course Code	Title of the Papers		Credit	Internal Marks	External Marks	Total Marks			
CC - 101	History, Principles and Foundation of Physical Education	64 hrs 4		30	70	100			
CC - 102	Anatomy and Physiology	64 hrs 4		30	70	100			
CC - 103	Elementary Statistics & Computer Application in Physical Education	64 hrs 4		30	70 (Th-50+Pr-20)	100			
	Elective Course (Anyone)								
EC - 101	Olympic Movement	64 hrs	4	30	70	100			
EC - 102	Officiating and Coaching	04 1118		30	70	100			
Part-B Practical Course									
PC - 101	Track & Field –I (Track Events)	64 hrs 4		30	70	100			
PC - 102	Badminton and Volleyball	64 hrs 4		30	70	100			
PC - 103	Football	64 hrs 4		30	70	100			
PC - 104	Mass Demonstration: March Past/ Lezium/Dumbbells/ Wands/Hoops/Umbrella	64 hrs	4	30	70	100			

Semester-II

Part A: Theory									
Course Code	Title of the Papers		Credit	Internal Marks	External Marks	Total Marks			
CC-201	Sports Medicine, Physiotherapy & Rehabilitation (Theory - 50+Practical - 20)		4	30	70	100			
CC- 202	Fitness and Wellness	64 hrs	4	30	70 (Th-50+Pr-20)	100			
CC- 203 Management and Administration in Physical Education and Sports		64 hrs	4	30	70	100			
	Elective Course (Anyone)								
EC-201	Nutrition & Weight Management								
EC-202	Educational Technology and Methods of Teaching in Physical Education		4	30	70	100			
	Part-B Practical Course								
PC-201 Track & Field –II (Field Events)			4	30	70	100			
PC-202	Yoga	64 hrs	4	30	70	100			
PC-203 Kho Kho & Kabaddi		64 hrs	4	30	70	100			
Part-C Teaching Practices									
TP-201	Teaching Practices (05 Lessons in Classroom teaching and 05 Lessons in Outdoor activities)	64 hrs	4	30	70	100			

Semester-III

Part A: Theory								
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks		
CC - 301	Sports Training	64 hrs	4	30	70	100		
CC - 302	Communication Skills		4	30	70	100		
CC - 303	Sports Psychology and Sociology	64 hrs	4	30	70 (Th-50+Pr-20)	100		
	Elective Course (Anyone)							
EC - 301	Curriculum Design		4	20	7 0	100		
EC - 302	Yoga Education	ducation 64 hrs		30	70	100		
OEC-301	Physical Education, Fitness and Wellness		4	30	70	100		
	Part-B Pra	ctical Co	urse					
PC-301 Basketball and Handball		64 hrs	4	30	70	100		
PC-302 Judo & Taekwondo		64 hrs	4	30	70	100		
PC-303 Table Tennis & Boxing		64 hrs	4	30	70	100		
Part-C Teaching Practices								
TP-301	Teaching Practices: 10 Lessons (Teaching Lesson Plans for various Games & Sport) 5 Internal and 5 External at Practicing School	64 hrs	4	30	70	100		

Semester-IV

Part A: Theory									
Course Code	Title of the Papers		Credit	Internal Marks	External Marks	Total Marks			
CC-401	Measurement & Evaluation in Physical Education and Sports		4	30	70 (Th-50+Pr-20)	100			
CC- 402	Kinesiology and Biomechanics	64 hrs	4	30	70	100			
CC- 403	Health Education and Environmental Studies		4	30	70	100			
	Elective Con	ırse (An	yone)						
EC-401	Adapted Physical Education	64 hrs	4	30	70	100			
EC-402	First Aid & Safety Education (Theory – 50 + Practical - 20)	04 1113							
	Part-B Practical Course								
PC-401 Weight Lifting and Weight Training		64 hrs	4	30	70	100			
PC-402	Archery and Aerobics	64 hrs	4	30	70	100			
Part-C Teaching Practices									
TP-401	Theory of Games & Sports Coaching Lesson Plans (5 Lessons)		4	30	70	100			
TP-402			4	30	70	100			

N.B: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

Semester – I Theory Courses CC-101 INTRODUCTION AND HISTORY OF PHYSICAL EDUCATION

OBJECTIVES:

- 1. To acquaint the learner with History of Physical Education
- 2. To acquaint the learner with the goals of education and Physical Education.
- 3. To understand the contribution of Philosophers of Education and Physical Education.
- 4. To understand the contribution of various people towards Physical Education.
- 5. To understand the modern development and social aspects of Physical Education

Unit -1: Introduction

- 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 - 2 – Historical Development of Physical Education in India during

- Indus Valley Civilization Period, Vedic Period, Epic Period, Early Hindu Period, Medieval Period, Muslim period, British period
- Physical education in Ancient Greece- Homeric age period of Greek
- Civilization and city states, comparative study of Spartan and Athenian Education.
- The origin and Development of ancient Olympic games.
- Physical education in ancient Rome, education and physicals education among the Romans,
 The circus, gladiatorial contests etc., decline of Roman civilization.

Unit – 3 Historical Development of Physical Education in India during

- Physical education in Germany, Sweden and Denmark.
- Modern Olympic:
- Contribution of Base- Dow, Salzmah, Gunsmiths john, Spies, Nepotegall, Ling etc.
- British Period (Before 1947)
- Physical Education in India (After 1947)
- Contribution of Akhadas and Vyayamshalas
- Y.M.C.A. and Teacher training institution in Physical Education.

Unit- 4- Commission, Awards and Sports Policies

- Commissions Dr. Kunzru commission, Kothari commission
- Awards and Trophies of sports at various level
- Various current, schemes and sports policies of State and Central Government pertaining to Physical Education and Sports
- Contribution of LNIPE, NSNIS and SAI in promoting Physical Education and Sports
- Nation plan of physical education and recreation.
- Nation Physical Efficiency Drive.
- The Indian Olympic Association and other Sport Association and Federations.

Sessional Work: (Any One)

- 1. Analysis of history of physical education from ancient period till 1947.
- 2. Seminar presentation on policies and commissions related to Physical Education in India.
- 3. Study of various schemes and Awards in Physical Education and sports in India

References:

Deshpande, S. H. (2014). Physical Education in Ancient India. Amravati: Degree college of Physical education.

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.

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

Semester - I Theory Courses CC-102 ANATOMY AND PHYSIOLOGY

OBJECTIVES:

- 1. To enable the learner to understand the basic structure and function of human body.
- 2. To acquire the knowledge regarding effect of exercise on the body as a whole.
- 3. To acquire the knowledge regarding the basic Physiological and Mechanical principles involved in the efficient body movements.
- 4. To acquaint the learner with school health programme.

UNIT-I

- 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
- Gender differences in the skeleton.
- Types of muscles.

UNIT-II

- Blood and circulatory system: Constituents of blood and their function —Blood groups and blood transfusion, clotting of blood, the structure of the heart-properties of the heart muscle, circulation of blood, cardiac cycle, blood pressure, Lymph and Lymphatic circulation. Cardiac output.
- The Respiratory system: The Respiratory passage the lungs and their structure and exchange of gases in the lungs, mechanism of respiration (internal and external respiration) lung capacity, tidal volume.
- The Digestive system: structure and functions of the digestive system, Digestive organs, Metabolism,
- The Excretory system: Structure and functions of the kidneys and the skin.

UNIT-III

- 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:
 - Neuromuscular junction
 - o Transmission of nerve impulse across it.
- Fuel for muscular activity
- Role of oxygen-physical training, oxygen debt, second wind, vital capacity.

UNIT-IV

- Effect of exercise and training on cardiovascular system.
- Effect of exercise and training on respiratory system.
- Effect of exercise and training on muscular system
- Physiological concept of physical fitness, warming up, conditioning and fatigue.

• Basic concept of balanced diet – Diet before, during and after competition.

Sessional Work: (Any One)

- 1. Chart paper presentation on various systems of the body
- 2. Project work on effects of exercise on muscular, respiratory and cardio vascular system of the body.
- 3. Analysis and explanation on the concept of balanced diet and nutritional chart.

References:

Gupta, A. P. (2010). Anatomy and Physiology. Agra: Sumit Prakashan.

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.

Karpovich, P. V. (n.d.). Philosophy of Muscular Activity. London: W.B. Saunders Co.

Lamb, G. S. (1982). Essentials of Exercise Physiology. Delhi: Surject 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 of Physiology and Health education. Ropar: Jeet Publications.



Semester – I Theory Courses

CC - 103 ELEMENTARY STATISTICS & COMPUTER APPLICATION IN PHYSICAL EDUCATION

OBJECTIVES:

- 1. To understand the concept of Statistics and Assessment Procedure in Physical Education.
- 2. To understand different tests in Physical Education.
- 3. To acquire the knowledge of various tests regarding Physical fitness, motor and health related fitness.
- 4. To understand the application of simple statistical procedures for evaluation.

Unit-I Introduction

- 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-II Statistical Models in Physical Education and Sports

- Measures of Central Tendency: Mean, Median and Mode-Meaning, Definition, Importance,
 Advantages, Disadvantages and Calculation from Group and Ungrouped data
- Measures of Variability: Meaning, importance, computing from group and ungroup data
- Percentiles and Quartiles: Meaning, importance, computing from group and ungroup data

Unit-III 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

Unit- IV Introduction to MS Word, MS Excel & MS Power Point

- 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 Creating, saving and opening spreadsheet in MS
 Excel creating formulas in MS Excel
- Format and editing features adjusting columns width and row height understanding charts in MS Excel
- Creating, saving and opening a MS Power Point file
- format and editing features slide show, design, inserting slide number
- picture ,graph ,table in MS PPT
- Preparation of Power point presentations

Sessional Work: (Any One)

- 1. Analysis of various scores and graphical presentation of scores through various techniques.
- 2. Seminar presentation on various statistical models in research.

3. Model preparation of the parts of the computer and power point presentation.

References:

Best, J.W. (1963). Research in Education. U.S.A.: Prentice Hall.

Bompa, T. O. & Haff, G. G. (2009). Periodization: Theory and Methodology of Training, 5th ed. Champaign, IL: Human Kinetics.

Brown, L. E., & Ferrigno, V. A. (2005). Training for speed, agility and , 2nd ed. Champaign, IL: Human Kinetics.

Brown, L.E. & Miller, J., (2005). How the Training Work. In: Training Speed, Agility, and Quickness. Brown, L.E. & Ferrigno, V.A & Ferrigno, V.A., eds. Champaign, IL: Human Kinetics. Carl, E. K., & Daniel, D. A. (1969). Modern Principles of Athletes Training. St. Louis: St. Louis's Mosby Company.

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. Landon: J.B. Lippincott Company.

Thomas, J.R., & Nelson J.K. (2005). Research Methods 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.

Uppal, A. K. (1990). Physical Fitness: How to Develop. New Delhi: Friends Publication.

Verma, J. P. (2000). A Text Book on Sports Statistics. Gwalior: Venus Publications.

Semester – I Theory Courses EC-101 OLYMPIC MOVEMENT (ELECTIVE)

OBJECTIVE:

- 1. To know the history of Olympic
- 2. To understand the growth and development of Olympic
- 3. To understand the Olympic movement and its significance in the modern world

Unit – I 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 Modern Olympic Games

- Significance of Olympic Ideals, Olympic Rings, Olympic Flag
- Olympic Protocol for member countries
- Olympic Code of Ethics
- Olympism in action
- Sports for All

Unit – III Different Olympic Games

- Para Olympic Games
- Summer Olympics
- Winter Olympics
- Youth Olympic Games

Unit – IV 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

Sessional Work: (Any One)

- 1. Analysis in detail of Olympic ideals, motto and symbols (in paper)
- 2. Discussion and analysis of various Olympic Games and venues.
- 3. Analysis of the IOC in terms of structure and functions. Preparation of list of Olympic medal winners of India.

Reference:

Osborne, M. P. (2004). Magic Tree House Fact Tracker: Ancient Greece and the Olympics: a nonfiction companion to magic tree house: hour of the Olympics. New York: Young Readers. Burbank, J. M., Andranovich, G. D. & Heying, Impact of Mega-Events on Local Politics: Lynne Rienner

Semester – I Theory Courses EC-102 OFFICIATING AND COACHING (Elective)

OBJECTIVES:

- 1. To understand the basic concept and principles of officiating and coaching of different games and sports.
- 2. To understand the rules, regulations and officiating of different games and sports
- 3. To acquaint the students with the duties and responsibilities of an officials and coaches.
- 4. To acquaint the students with dimensions and actual markings of different play fields, courts and arenas
- 5. To understand the basic concept and principles of officiating and coaching of

Unit- I: Introduction of Officiating and coaching

- Concept of officiating and coaching
- Importance and principles of officiating and coaching
- Relation of official and coach with management, players and spectators
- Measures of improving the standards of officiating and coaching

Unit- II: Coach as a Mentor

- Duties of coach in general, pre, during and post game.
- Philosophy of coaching
- Responsibilities of a coach on and off the field
- Psychology of competition and coaching

Unit- III: Duties of Official

- Duties of official in general, pre, during and post game.
- Philosophy of officiating
- Mechanics of officiating position, singles and movement etc.
- Ethics of officiating

Unit- IV: Qualities and Qualifications of Coach and Official

- Qualities and qualification 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

Sessional Work: (Any One)

- 1. Discussion and presentation in the class regarding the principles of officiating and coaching and its requirement and preparation/planning.
- 2. Discussion on preparation of a team for competitions/tournaments as a coach or an official of an institute.

Reference Books:

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

Semester – II Theory Courses CC-201 SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

OBJECTIVES:

- 1. This paper will help understand the need and importance of sports medicine, Physiotherapy and rehabilitation techniques and process
- 2. Will help the students to understand and facilitate the process of recovery from injury, illness or disease to normal condition as soon as possible.
- 3. Will enable the learners in acquiring proper and adequate rehabilitation program in helping athletes or sportsperson to reverse many disabling conditions or patients cope with deficits that cannot be reversed by medical care.

Unit-I: - Sports Medicine:

- Sports Medicine: Meaning, Definition, Aims, Objectives, Modern Concepts and Importance.
- Athletes Care and Rehabilitation: Contribution of Physical Education Teachers and Coaches.
- Need and Importance of the study of sports injuries in the field of Physical Education
- Prevention of injuries in sports Common sports injuries Diagnosis –
- First Aid Treatment Laceration Blisters Contusion Strain Sprain Fracture Dislocation and Cramps Bandages Types of Bandages trapping and supports.

Unit-II: Physiotherapy

 Definition – Guiding principles of physiotherapy, Importance of physiotherapy, Introduction and demonstration of treatments - Electrotherapy – infrared rays – Ultraviolet rays –short wave diathermy – ultrasonic rays.

Unit-III: Hydrotherapy:

• Introduction and demonstration of treatments of Cryo therapy, Thermo-therapy, Contrast Bath, Whirlpool Bath – Steam Bath – Sauna Bath – Hot Water Fomentation; Massage: History of Massage – Classification of Manipulation (Swedish System) physiological Effect of Massage.

Unit-IV: Therapeutic Exercise:

Definition and Scope – Principles of Therapeutic Exercise – Classification, Effects and uses of Therapeutic exercise – passive Movements (Relaxed, Forced and passive - stretching) – active movements (concentric, Eccentric and static) application of the therapeutic exercise: Free Mobility Exercise – Shoulder, Elbow – Wrist and Finger Joints – Hips, Knee, ankle and Foot joints – Trunk. Head and Neck exercises.

Sessional Work: (Any One)

- 1. Visit to a local physio-therapy centre and preparing a detailed report on types of injuries, equipments and other requirements for an ideal physio-therapy centre.
- 2. Preparing a list of injuries involved in at least 15 games and sports.

References:

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.

Hunter, M. D. (1979). A 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

Jeyaprakash, C. S., Sports Medicine, J.P. Brothers Pub., New Delhi, 2003.

Khanna, G.L., (1990). Exercise Physiology & Sports Medicine. Delhi: Lucky Enterprises.

Mathew, D.K. & Fox, E.L, (1971). Physiological Basis of Physical Education and Athletics. Philadelphia: W.B. Saunders Co.

Pandey, P.K., (1987). Outline of Sports Medicine, New Delhi: J.P. Brothers Pub.

Williams, J. G. P. (1962). Sports Medicine. London: Edward Arnold Ltd.

Semester – II Theory Courses CC-202 FITNESS AND WELLNESS

OBJECTIVES:

- 1. To enable the learner to understand the meaning and importance of fitness and wellness
- 2. To acquire the knowledge regarding effect of exercise on the body as a whole
- 3. To enable the learner to understand the need and importance of being fit and healthy
- 4. To understand the inter relationship between fitness and wellness
- 5. To acquaint the learner with various types of fitness programme and its designing according to need of an individual

Unit – I Concept of Physical Education and Fitness

- Definition, Aims and Objectives of Physical Education, fitness and Wellness
- Importance and Scope of fitness and wellness
- Modern concept of Physical fitness and Wellness
- Physical Education and its Relevance in Inter Disciplinary Context.

Unit – II Fitness, Wellness and Lifestyle

- Fitness Types of Fitness and Components of Fitness
- Understanding of Wellness
- Modern Lifestyle and Hypo kinetic Diseases Prevention and Management
- Physical Activity and Health Benefits

Unit – III Principles of Exercise Program

- Means 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 group.

Unit – IV Fitness Training Programme

- Fitness programme for professional sports person
- Design training programme on the basis of
 - o Age
 - o Sex
 - Physical deformities
 - o Rehabilitative fitness programme

Sessional Work: (Any One)

- 1. Analysis the concept, meaning and need of fitness and wellness education in modern world.
- 2. Preparation of fitness programme for all categories i.e., sports persons, children, college and school students, for employees, for old population, people with disabilities etc.

References:

Difiore, J.(1998). Complete Guide to Postnatal Fitness. London: A & C Black,.

Giam, C.K & 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.

Theory Courses EC-203 MANAGEMENT AND ADMINISTRATION IN PHYSICAL EDUCATION & SPORTS

OBJECTIVES:

- 1. To understand the importance of management of Physical Education at different level
- 2. To gain knowledge regarding the organization of various Physical Education programmes
- 3. To acquire knowledge regarding development of infrastructure and maintenance of facilities needed for Physical Education and Sports
- 4. To gain knowledge of various schemes and plans of State/Central Government.

Unit -I

- Nature and concept of management.
- Progressive concept of Management
- The purpose and scope of Sports Management.
- Essential skills of Sports Management. Qualities and competencies required for the Sports Manager.
- Event Management in physical education and sports.

Unit-II

- Meaning and Definition of leadership
- Leadership style and method.
- Elements of leadership.
- Forms of Leadership.
 - Autocratic
 - Laissez-faire
 - Democratic
 - Benevolent Dictator
- Oualities of administrative leader.
- Preparation of administrative leader.
- Leadership and Organizational performance.

Unit-III

- Sports Management in Schools, colleges and Universities.
- Factors affecting planning
- Planning a school or college sports programme.
- Directing of school or college sports programme.
- Controlling a school, college and university sports programme.
 - Developing performance standard
 - o Establishing a reporting system
 - o Evaluation The reward/punishment system

Unit-IV

- Financial management in Physical Education & sports in schools, Colleges and Universities.
- Budget-Importance, Criteria of good budget,
- Steps of Budget making

- Principles of budgeting
- Organising of Competitions- Types of Tournament and its organization structure Knock-out Tournaments, League or Round Robin Tournaments, Combination Tournament and challenge Tournament.
 - o Constitution and structure of a Committee for Athletic Meet
 - o Sports Event Intramurals & Extramural Tournament planning
 - o Draw of fixtures and seeding

Sessional Work: (Any One)

- 1. Visit and preparation of detailed report on financial management and budget preparation of any sports institute.
- 2. Prepare a Plan for conduct of Inter College Sports Tournament consisting colleges affiliated to RGU, Doimukh

REFERENCES:

Ashton, D. (1968). Administration of Physical Education for Women. New York: The Ronal Press Cl. Bucher, C.A. Administration of Physical Education and Athletic Programme. 7th Edition, St. Louis: The C.V. Mosby Co.

Daughtrey, G. & Woods, J.B. (1976). Physical Education and Intramural Programmes, Organisation and Administration. Philadelphia U.S.A.: W.B. Sounders Cp.

Earl, F. Z,& Gary, W. B. (1963).Management Competency Development in Sports and Physical Education. Philadelphia: W. Lea and Febiger

Semester – II Theory Courses

EC-202 EDUCATIONAL TECHNOLOGY IN PHYSICAL EDUCATION (ELECTIVE)

OBJECTIVES:

- 1. To understand the conceptual framework of educational technology.
- 2. Make use of instructional media in physical education
- 3. To familiarize the learner about the teaching learning process
- 4. To acquaint the learner with the principles of teaching physical activity.
- 5. To acquaint the students with planning, objectives of different types of lessons.
- 6. To bring awareness of innovation in teaching process

Unit – I Concept of Educational Technology

- Nature and Scope of Educational Technology
- Objectives of Education Technology
- Forms of Education Technology
- Use of Education Technology
- Use of Education Technology in Formal and Non Formal Technology
- Problems of Educational Technology in Indian context

Unit – II Teaching Learning Process in Physical Education

- Concepts of teaching and learning
- Structure of teaching learning process
- Levels and phases of teaching and learning process
- Taxonomy of educational objectives

Unit – III Communication and Instructional Technology

- Concept and principles of communication
- Process and principles of communication
- Process and barriers of communication
- Role of mass media and multimedia approach
- Concept of instructional technology
- Method of Approach technology
 - o Programmed instruction (PI)
 - o Personalised System of Instruction (PSI)
 - o Basic features and effectiveness of new approaches in of teaching

Unit – IV Teaching Skills and Lesson

- Meeting sources and identification of teaching skills
- Macro Teaching and Simulated Social Skill Teaching (SSST)
- Meaning and importance of Lesson Plan
- Steps of Lesson Plan
- Evaluation



Sessional Work: (Anyone)

- 1. Preparation of Instructional based on PI or PSI
- 2. Writing of instructional objectives in behavioral form
- 3. Teaching through computer
- 4. Preparation of Lesson Plan

Reference:

Bhardwaj, A. (2003). New Media of Educational Planning. New Delhi: Sarup 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.

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. Jallandhar: Paul Publishers.

Semester - II Theory Courses

EC-202 NUTRITION AND WEIGHT MANAGEMENT (ELECTIVE)

OBJECTIVES:

- 1. Through this paper the students will acquire knowledge about the nutrition and its components
- 2. The students will acquire knowledge regarding the relationship between nutrition and weight management
- 3. The students will also gain knowledge about the relationship between balanced diet and maintenance of a healthy life style

Unit – I Introduction to Nutrition

- Meaning and Definition of Nutrition
- Basic Nutrition guidelines
- Role of nutrition in sports
- Factors to be considered for developing nutrition plan

Unit – II 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 Nutrition and Weight Management

- Meaning of weight management Concept of weight management in modern era Factor affecting weight management and values of weight management
- Concept of BMI (Body mass index), Obesity and its hazard, Myth of Spot reduction, Dieting versus exercise for weight control, Common Myths about Weight Loss
- Obesity Definition, meaning and types of obesity,
- Health Risks Associated with Obesity, Obesity Causes and Solutions for Overcoming Obesity.

Unit – IV Steps in Planning Weight Management

- Nutrition Daily calorie intake and expenditure, Determination of desirable body weight
- Balanced diet for Indian School Children, Maintaining a Healthy Lifestyle
- Weight management program for sporty child, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss

Sessional Work: (Any One)

- 1. Discuss and analyse on various components of nutrition and its role in maintenance of human body.
- 2. Plan a balanced diet with an exercise schedule for an individual with issues of obesity.

References:

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. De Maria, E. J. (2007). Bariatric Surgery for Morbid Obesity. N. Engl J Med,356(21), 2176-2183. Dixon, J.B., O'Brien, P.E., Play fair, J. (n.d.). Adjustable Gastric Banding and Conventional Therapy for type 2 Diabetes: A Randomized Controlled Trial. JAMA. 299(3), 316-323

Semester – III Theory Courses CC-301 SPORTS TRAINING

OBJECTIVES

- 1. To understand the basic concept and principles of training of different games and sports.
- 2. To understand the rules and regulations of different games and sports
- 3. To acquaint the students with the duties and responsibilities of an officials and coaches.
- 4. To understand the methods of conditioning exercises, planning and periodisation of training

Unit – I Introduction to Sports Training

- Meaning and Definition of Sports Training
- Aim and Objective of Sports Training
- Principles of Sports Training
- System of Sports Training Basic Performance, Good Performance and High Performance Training

Unit – II Training Components

- Strength Mean and Methods of Strength Development
- Speed Mean and Methods of Speed Development
- Endurance Mean and Methods of Endurance Development
- Coordination Mean and Methods of coordination Development
- Flexibility Mean and Methods of Flexibility Development

Unit – III Training Process

- Training Load- Definition and Types of Training Load
- Principles of Intensity and Volume of stimulus
- Technical Training Meaning and Methods of Technique Training
- Tactical Training Meaning and Methods of Tactical Training

Unit – IV Training programming and planning

- Periodization Meaning and types of Periodization
- Aim and Content of Periods Preparatory, Competition, Transitional etc.
- Planning Training session
- Talent Identification and Development

Sessional Work: (Any One)

- 1. Prepare a detailed Chart indicating the training methods of developments of strength, speed, endurance, flexibility etc.
- 2. Prepare a detailed chart discussing the different types of training methods.

Reference:

Dick. W. F. (1980).**Sports** Training Principles. London: Lepus Books. **Principles** D. (1982).of **Sports** Training. Berlin: Sporulated. Jensen, R. C.& Fisher, A.G. (1979). Scientific Basis of Athletic Conditioning. Philadelphia: Lea and Fibiger, 2nd Edn.

Matvyew, L.P. (1981). Fundamental of Sports Training. Moscow: Progress Publishers. Singh, H. (1984). Sports Training, General Theory and Methods Patiala: NSNIS. Uppal, A.K., (1999). Sports Training. New Delhi: Friends Publication.

Semester – III Theory Courses CC-302 COMMUNICATION SKILLS

OBJECTIVE:

- 1. Students will learn about effective communication using verbal and written techniques, including electronic media.
- 2. To enable the students to select and apply communication skills to resolve conflict and effectively respond to others.
- 3. To enable the students to demonstrate their communication skills in contexts such as formal presentations, informal interactions, movement settings, social situations and in advocating health and physical activity.

Unit-I: Introduction to communication

- Meaning and significances of communication
- Types of communication
- Methods of communication
- Barriers to effective communication
- Developing effective communication skills

Unit-II: Written communication

- Principles of effective communication
- Relevance of grammar
- Composition of sentences
- Mechanics of communication in writing
- Letter drafting

Unit-III: Non-verbal communication

- Para language, body language and its significance
- Carbon copying and effective use of body parts in communication
- Area of influence and local culture
- Indicators and pointers
- Chairs, Tables and Office setup

Unit-IV: Special communicative skills

- Motivation skills
- Negotiation skills
- Interpersonal skill
- Interview technique
- Soft skills for academic presentations—Structuring the presentation Choosing appropriate medium (Flip charts Power Point presentations) Clarity and brevity Interaction and persuasion Interview skills—Group Discussions

Sessional Work: (Any One)

- 1. Conduct of Mock Interview and assessment by Teacher
- 2. Power Point presentation of Bio-data by students
- 3. Drafting of Letters on various points
- 4. Importance of Non Verbal Communication in physical education profession.

Reference:

Effective Communication for Arts and Humanities Students, Joan Van Emden and Lucinda Becker: Palgrave Macmillan

Sharma R. C., Mohan Krishna, Business Correspondence and Report Writing (New Delhi : Tata McGraw -Hill Co. Ltd. 2002)

Bhattacharya, Indrajit, An Approach to Communication Skill, (N. Delhi : Dhanpatrai Co. Pvt. Ltd.)

Wright Chrissies, Hand Book of Practical Communication Skills, (Mumbai: Jaico Pub.House)

Semester – III Theory Courses CC-303 SPORTS PSYCHOLOGY AND SOCIOLOGY

OBJECTIVE:

- 1. To develop an understanding of the nature, scope & methods of psychology and sociology in physical education & sports.
- 2. To acquire knowledge of the stages of growth & development with special emphasis on childhood & adolescence stage & physical education activities for the same.
- 5. To develop an understanding of the role of sociology in understanding physical education and sports from sociological point of view.
- 6. To develop an understanding of the concept of personality, factors affecting personality development and the role of teacher in promoting mental health of students.
- 7. To understand group structure and group dynamics as relevant to classroom situations.

Unit -I: Introduction

- Meaning, Importance, Relevance 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 and environment
- Methods of psychological study.
 - Introspection method
 - Observation method
 - Experimental method
- Psycho-sociological aspects of Human behavior in relation to physical education and sports

Unit-II: Sports Psychology

- Nature of learning, theories of learning, Laws of learning,
- Plateau in Learning; & transfer of training
- Meaning and definition of personality, characteristics of personality,
- Dimension of personality, Personality and Sports performance
- Nature of motivation: Factors influencing motivation; Motivation and techniques and its impact on sports performance.
- Mental Preparation Strategies: Attention focus, Self-talk, Relaxation, Imaginary.
- Aggression and Sports, Meaning and nature of anxiety, Kinds of anxiety
- Meaning and nature of stress; Types of stress, Anxiety, Stress, Arousal and their effects on sports performance

Unit-III: Relation between Social Science and Physical Education.

- Orthodoxy, customs, Tradition and Physical Education.
- Festivals and Physical Education.
- Socialization through Physical Education.
- Social Group life, Social conglomeration and Social group, Primary group and Remote group.

Unit-4 Culture: Meaning and Importance.

- Features of culture,
- Importance of culture.
- Effects of culture on people life style.
- Different methods of studying Observation/ Inspection method, Questionnaire method, Interview method

Sessional Work: (Any One)

1. Conduct at least 2 psychological tests and write a report on the findings.

2. Discuss and analyse the importance of sports in bringing the society in to a new world order.

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.

Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1981). Sports Culture and Society. Philadelphia: Lea & Febiger.

Mathur, S.S., (1962). Educational Psychology. Agra. Vinod Pustak Mandir.

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.

Semester - III Theory Courses EC-301 CURRICULUM DESIGN (Elective)

OBJECTIVES

- 1. To understand the concept of curriculum and its development and physical education
- 2. Understand the utility of curriculum
- 3. To understand the place of Physical Education in school curriculum.
- 4. To acquaint the learner with planning, presentation technique and class management of teaching various activities in Physical Education.
- 5. To acquaint the learner with different methods of teaching physical activities.
- 6. To acquaint the learner with the principles of teaching physical activity.
- 7. To acquaint the students with planning, objectives of different types of lessons.
- 8. To acquaint the learner with organizing and conducting various types of tournaments and athletic meet.

Unit-I Conceptual framework of curriculum in relation to physical education

- Concept, nature and need of curriculum.
- Principles of curriculum development in physical education.
- Segments of curriculum
- Bases of curriculum

Unit-II Curriculum development

- Curriculum Theory
- Types of curriculum
- Development of curriculum :various steps

Unit- III Curriculum Transaction.

- Process of curriculum transaction
- Instructional objectives
- Content analysis
- Teaching strategies
- Use of hardware and software

Unit - IV Evaluation of Curriculum

- Concept of evaluation
- Steps of curriculum evaluation
- Utility of curriculum evaluation
- Feedback and modification of curriculum
- Action research

Sessional Work:

- 1. Analysis of Curriculum of B. P. Ed.
- 2. Selecting a problem and conducting a action research
- 3. Content analysis of any paper of B. P. Ed. And suggesting some measures to improve the paper.

References:

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.

Semester - III Theory Courses EC-302 YOGA EDUCATION (ELECTIVE)

OBJECTIVES

- 1. This paper will help the students to learn the origin and history of yoga in India and the importance of yoga in daily life.
- 2. Will help in acquiring knowledge about Yoga education in prevention of disease and promotion of health
- 3. To train students in Yogic principles and practices.
- 4. To prepare and standardized Yoga teaching and training programme in the Arunachal context

Unit – I: Introduction

- Meaning and Definition of Yoga
- Aims and Objectives of Yoga
- Yoga in Early Upanisads
- The Yoga Sutra: General Consideration
- Need and Importance of Yoga in Physical Education and Sports

Unit - II: Foundation of Yoga

- The Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi
- Yoga in the Bhagavadgita Karma Yoga, Raja Yoga, Jnana Yoga and Bhakti Yoga

Unit - III Asanas

- Effect of Asanas and Pranayama on various system of the body
- Classification of asanas with special reference to physical education and sports
- Influences of relaxative, meditative posture on various system of the body
- Types of Bandhas and mudras
- Type of kriyas

Unit – IV Yoga Education

- Yoga for various groups according to need and as a rehabilitative form
- Difference between yogic practices and physical exercises
- Yoga education centers in India and abroad
- Competitions in Yogasanas

Sessional Work: (Any One)

- 1. One lecture on importance of Yoga Education on Various NCDS (Non Communicable Disease) i.e. Hypertension, diabetes etc.
- 2. Project work on benefits of yoga on stress management.

References:

Brown, F. Y.(2000). How to Use Yoga? Delhi: Sports Publication.

Gharote, M. L. & Ganguly, H. (1988). Teaching Methods for Yogic Practices.

Rajjan, S. M. (1985). Yoga Strengthening of Relaxation for Sports Man. New Delhi Publishers.

Shankar, G.(1998). Holistic Approach of Yoga. New Delhi: Aditya Publishers.

Shekar, K. C. (2003). Yoga for Health. Delhi: Khel Sahitya Kendra.

Semester – IV Theory Courses

CC-401 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION & SPORTS OBJECTIVE

- 1. To understand the concept of test, Measurement, Evaluation and Assessment Procedure in Physical Education.
- 2. To understand different tests in Physical Education.
- 3. To acquire the knowledge of various tests regarding Physical fitness, motor and health related fitness.
- 4. To understand various sports skill tests

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

Unit- II Criteria; Classification and Administration of test

- Criteria of good Test
- Criteria of tests, scientific authenticity (reliability, objectivity, validity and availability of norms)
- Type and classification of Test
- Administration of test, advance preparation Duties during testing Duties after testing.

Unit- III Physical Fitness Tests

- AAHPER youth fitness test
- Kraus Weber Fitness Test
- Indiana Motor Fitness Test
- JCR test
- Harvard Step Test
- Tuttle Pulse Ratio Test

Unit- IV Sports Skill Tests

- Lockhart and McPherson badminton test
- Johnson basketball test
- McDonald soccer test
- Brady volleyball test
- Harbans Hockey test

Sessional Work: (Any One)

- 1. Conducting a test for assessment of strength and speed abilities of athletes and preparing a report.
- 2. Conducting a test for assessment of endurance and flexibility of an athlete and preparing a report

References:

Bangsbo, J. (1994). Fitness Training in Football: A scientific approach. Bagsvaerd, Denmark Barron, H. M., & Mchee, R. (1997). A Practical Approach to Measurement in Physical Education. Philadelphia: Lea and Febiger.

Barron, H.M. & Mchee, R. (1997). A Practical Approach to Measurement in Physical Education. Philadelphia: Lea and Febiger.

Mathews, D.K., (1973). Measurement in Physical Education, Philadelphia: W.B. Sounders Company.

Pheasant, S. (1996). Body Space: Anthropometry, Ergonomics and Design of Work. Taylor & Francis, New York.

Semester – IV Theory Courses CC-402 KINESIOLOGY AND BIOMECHANICS

OBJECTIVES:

- 1. To enable the learner to understand the basic structure and function of human body.
- 2. To acquire the knowledge regarding effect of exercise on the body as a whole.
- 3. To understand the importance of normal movements of the human body and kinesiological analysis.
- 4. To acquire the knowledge regarding the basic Physiological and Mechanical principles involved in the efficient body movements.
- 5. To enable the learner to understand the need and importance of health education and community health
- 6. To acquaint the learner with school health programme.

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, Equilibrium, Line of Gravity

Unit – II Fundamental Concept of Anatomy and Physiology

- Classification of Joints and Muscles
- Types of Muscle Contractions
- Posture Meaning, Types and Importance of good posture.
- Fundamental concepts of following terms- Angle of Pull, All or None Law, Reciprocal Innervations

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 Kinematics and Kinetics of Human Movement

- Linear Kinematics Distance and Displacement, speed and velocity, Acceleration
- Angular kinematics Angular Distance and Displacement, Angular Speed and velocity, Angular Acceleration.
- Linear Kinetics Inertia, Mass, Momentum, Friction.
- Angular Kinetics Moment of inertia, Couple, Stability.

Sessional Work: (Any One)

- 1. Preparation of a study material on various terminologies of fundamental movements to teach students.
- 2. Preparation of Charts to teach the mechanical concepts applicable in sports.

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). Fundamentals of Sport Biomechanics. Englewood Cliffs, N.J.: Prentice Hall Inc.

Semester – IV Theory Courses CC-403 HEALTH EDUCATION AND ENVIRONMENTAL STUDIES

OBJECTIVES:

- 1. To understand the components of health education.
- 2. To study various kind of communicable & infectious diseases
- 3. To create awareness about fitness & its importance in life.
- 4. To create awareness about the relationship between human being and the environment
- 5. To educate the students regarding the importance of sustainable development

Unit – I Health Education

- Concept, Dimensions, Spectrum and Determinants of Health
- Definition of Health, Health Education, Health Instruction, Health Supervision
- Aim, objective 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, 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, Eye health service, Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care etc.

Unit – III Environmental Science

- Definition, Scope, Need and Importance of environmental studies
- Concept of environmental education, Historical background of environmental education
- Celebration of various days in relation with environment.
- Plastic recycling & probation of plastic bag / cover.
- Role of school in environmental conservation and sustainable development.

Unit – IV 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.

Sessional Work: (Anyone)

- 1. Taking a class on awareness and concept of health education, determinants health and personal hygiene.
- 2. Prepare a course material on impact of pollution and on various resources, human health and eco system.

References:

Agrawal, K.C. (2001). Environmental Biology. Bikaner: Nidhi publishers Ltd.

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: Harber and Brothers.

Odum, E.P. (1971). Fundamental of Ecology. U.S.A.: W.B. Saunders Co.

Semester – IV Theory Courses EC-401 ADAPTED PHYSICAL EDUCATION (ELECTIVE)

OBJECTIVES:

- 3. To understand the meaning, need and importance of Adapted Physical Education
- 4. To enable the students to know the purpose, aims and objectives of Adapted Physical Education
- 5. To understand the Test, Measurement and Evaluation in Adapted Physical Education
- 6. To develop the Individual Education Program of Adapted Physical Education
- 7. To understand the role of games and sports in disability and physical activity implications through Adapted Physical Education
- 8. Understand wide range of disabilities and associated characteristics
- 9. Understand how specific individual characteristics can influence movement skill functioning

Unit - I : An Introduction to Adapted Physical Education

- Meaning, Need 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
- Adapted Sports- Para Olympics
- Test, Measurement and Evaluation in Adapted Physical Education

Unit - II: 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
- Teaching style, method and approach in teaching Adapted Physical Education

Unit - III: Developmental Considerations of an Individual

- Motor development
- Perceptual Motor development
- Early childhood and Adapted Physical Education

Unit - IV: Individual with unique need and activities

- Behavioral and Special learning disability
- Visual Impaired and Deafness
- Health Impaired students and Physical Education
- HRPF and its development for Individual with unique need
- Role of games and sports in Adapted Physical Education

Sessional Work: (Anyone)

- 1. Analyse and Discuss in detail the causes of different types of disabilities (cognitive, affective & psychomotor)
- 2. Visiting any institution specialized in care of children with disabilities a preparing a suitable exercise programme for the students.

Reference:

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 Physical Education for Elementary School Children. (11th Edition): Allyn and Bacon Publishing.

Semester – IV Theory Courses EC 402 FIRST AID AND SAFETY EDUCATION (ELECTIVE)

OBJECTIVES:

- 1. To enable the students to understand the meaning, need and importance of First Aid and Safety Education in daily life
- 2. Will help students in explaining the factors leading to sports injuries
- 3. Describe in detail the symptoms, causes and treatment of common sports injuries
- 4. Take safety measures to reduce the risk of sports injuries
- 5. Will help the students to equip themselves in the initial care of injuries in sporting situations and any kind of emergencies in daily life
- 6. Acquainting the students with some of the things that make the environment unsafe, as well as some consequences of unsafe environment and risk behaviours.

Unit - I: Meaning of First Aid and Safety Education

- Definition of First Aid and Emergency care and Safety Education and accident prevention
- Knowledge of first aid and Safety Education and accident prevention
- Need and importance of Health and Safety in Daily Life
- Effect of common injuries and their management

Unit - II: Factors Leading to Sports Injuries

- Environmental factors-heat cramps, heat exhaustion, heatstroke-hypothermia due to cold, Frostbite, Wind chill rain and very high relative humidity and control of movement-outdoors activities- air pollution, Air Quality Health Index respiratory and cardiovascular diseases
- Facilities and equipment installation inspection and regular maintenance-proper fitting of clothing and materials - impact-absorbing- Sports grounds- scientific design, regular maintenance, removal of unwanted foreign substances, regular watering and mowing of outdoor courts-curb on an athletics track
- Protective devices to reduce the risk of injury
- Level of skill
- Level of fitness
- Physical limitations
- Nature of different sports
- Level of contact
- Mismatching of players
- Physical limitations -height, weight, strength, Eyesight, high arch or flat feet and technique
- Nature of different sports Level of contact Mismatching of players

Unit – III Common sports injuries

- Bleeding-Abrasion-Contusion injury to soft tissue (Musculoskeletal injuries)-Dislocation injury to joint (Musculoskeletal injuries)
- Heat cramps- Heat Stroke
- Closed fracture
- Direct trauma:
- Avulsion fracture
- Stress fracture
 - Open fracture

- Stress Fracture
- o Pulled / Strained muscle injury to muscle
- Sprain injury to ligaments
- Heat and Cold Injuries Environmental injuries
- Heat injuries
 - Heatstroke
 - o Heat exhaustion
- Overuse injuries

Unit – IV Emergency care and treatment of injuries

- General principles of first aid PRICE
- Types of Emergency, knowledge and its care of Respiratory emergencies (Asphyxiation)-CPR(cardio pulmonary resuscitations)- Poisoning- Bites(Insect-Snake-Human- Animal)
- Sudden illness or injury- Heart attack, stroke- burns and radiation.
- Entry of foreign particles in the body- Eyes, Ear and Nose

Sessional Work: (Any One)

- 1. Power point presentation explaining various types of sports injuries.
- 2. Preparing a chart paper educating school students on Safety Education.

Reference:

Laoye, .J.A. (1979). Principle and Practice of Health Education. Ibadan: Macmillan Publisher. ISBN: 03330-86260.

Obiyemi O. O. and Oyerinde (2001). First Aid and Safety Education. Ilorin: Department of Human Kinetics and Health Education, University of Ilorin. ISBN: 978-2900-30-2.

Oyerinde, O.O. (1994). All time Health Education for College Students and Individuals, 1st Ed. Ibadan – Fabonis Publishers.

Hyde, T.E., & Gengenbach, M.S. (2007). Conservative Management of Sports Injuries. Sudbury, MA: Jones and Bartlett.

Bird, S., Neil, B. & Newton, P. (Eds.). (1997). Sports Injuries: Causes, Diagnosis, Treatment and Prevention. Cheltenham, UK: Stanley Thornes.

Part – B Practical Courses Semester – I

PC - 101

Track and Field: Running Events

PC 102 (Any one out of three)

Gymnastics: Floor Exercise

PC - 102

Swimming: Fundamental Skills

PC – 102 Shooting

PC – 103 Indigenous sports: Kabaddi: Fundamental Skills

PC - 103

Malkhambh and Light Apparatus:

PC -104

Kho Kho

PC-104

Dumbells/Wands./Hoops/Umbrella/Tipri

Semester - II

PC -201 Track and Field Athletics: Jumping Events

PC -202

Yoga

PC -202 Swimming

Introduction to water polo Introduction to Diving Sports

PC -202

Aerobics

PC -203

Badminton

PC -203

Table Tennis

PC-203

Squash

PC-203

Tennis

Semester-III

PC-301

Track and Field (Throwing Events)

PC-302

Boxing: Fundamental Skills

PC-302

Karate: Fundamental Skills

PC-302

Taekwondo

PC-302

Judo

PC-302

Wrestling

PC-302

Fencing

PC-303 Team Games

PC 303

Baseball

PC 303

Netball

PC 303

Cricket

PC 303

Football

PC 303

Hockey

PC 303 Softball

PC 303 Volleyball

PC 303 Handball

PC 303 Basketball

TP – 201 Teaching Practice (10 Lessons)

- 5 Lessons in Classroom
- 5 Lessons on Outdoor Activities within campus on the B.P. Ed students

TP – 301 Teaching Practice (10 Lessons) Racket Sports/Team Games /Indigenous Sports

- 5 Lessons within campus on the B. P. Ed students
- 5 Lessons outside the campus at different schools

TP – 401 Sports Specialization: Track and Field / Gymnastics / Swimming

• (4 internal lesson at practicing school and 1 final external lesson on the students of practicing school as a sports specialization of any discipline mentioned above.)

TP- 402 Games Specialization: Kabaddi, Kho-kho, Cricket, Football, Hockey, Volleyball, Handball, Basketball, Badminton, Table Tennis, Squash, Tennis

• (4 internal lesson at practicing school and 1 final external lesson on the students of practicing school as a games specialization of any discipline mentioned above.)

Table – 1: Semester wise distribution of hours per week

Semester	Theory	Practicum	Teaching Practice	Total		
I.	16	24	00	40		
II.	16	18	6	40		
III.	16	18	6	40		
IV.	16	12	12	40		
Total	64	72	24	160		
Minimum of 36 hours per week is required in five six days in a week						

Table-2: Number of credits per semester

Semester	Theory	Practicum	Teaching Practice	Total		
I.	I. 16 16		00	32		
II.	16	12	04	32		
III.	16	12	04	32		
IV.	16	08	08	32		
Total 64 48 16				128		
Minimum of 36 hours per week is required in five six days in a week						