

Structure of Syllabus

Subject: M.P.Ed. (Master of Physical Education)

Course code		Course Title	Credits (20/Sem)	T/P	Evaluation: 100	
A	B				C	D
SEMESTER I (YEAR I)						
E080501T	Core	Physical Fitness, Health and Wellness	4	T	25	75
E080502T	Core	Physiology of Exercise	4	T	25	75
E080503T	Core	Research Methodology in Physical Education	4	T	25	75
E080504T	FIRST ELECTIVE (Select any one)	Test Measurement and Evaluation in Physical Education	4	T	25	75
E080505T		Sports Sociology				
E080506P	Second ELECTIVE (Select any one)	Track and Field I Running Events \Gymnastics\Swimming (Any one)	4	P	50	50
E080507P		Combative Sports: Boxing\Karate\Taekwondo\Judo				
SEMESTER II (YEAR I)						
E080601T	Core	Applied Statistic in Physical Education and Sports	4	T	25	75
E080602T	Core	Sports Biomechanics and kinesiology	4	T	25	75
E080603T	Core	Sports Medicine, Nutrition, Athletic Care & Rehabilitation	4	T	25	75
E080604T	Third ELECTIVE (Select any one)	Sports Management	4	T	25	75
E080605T		Yogic Sciences				
E080606P	FOURTH ELECTIVE (Select any one)	Track and Field II: Jumping Events & Hurdle\Gymnastics\Swimming	4	P	50	50
E080607P		Internship on Teaching & Coaching				
SEMESTER III (YEAR II)						
E080701T	CORE	Scientific Principles of Sports Training	4	T	25	75
E080702T	CORE	Sports Journalism and Mass Media	4	T	25	75
E080703T	CORE	Sports Engineering and Technology	4		25	75
E080704T	FIFTH ELECTIVE (Select any one)	Planning and Evaluation of Sports Training	4	T	25	75
E080705T		Evaluation Techniques in Physical Education				
E080706P	SIXTH ELECTIVE (Select any one)	Track and Field III: Throwing Events and Heptathlon\Gymnastics\Swimming	4	P	50	50
E080707P		Game Specialization				
SEMESTER IV (YEAR II)						
E080801T	CORE	ICT in Physical Education and Sports	4	T	25	75
E080802T	CORE	Sports Psychology	4	T	25	75
E080803T	SEVENTH ELECTIVE (Select any one)	Gender Studies in Physical Education	4	T	25	75
E080804T		Disability\Inclusive Sports Education				
E080805R	MRP	Major Research Project\Dissertation	8	R	-	100

PHYSICAL FITNESS, HEALTH AND WELLNESS

Unit I - Physical Fitness

Meaning and Definition of Physical Fitness, Physical Fitness Concepts and techniques, Principles of Physical Fitness, Physiological Principles involved in human movement. Components of Physical Fitness. Leisure time physical activity and identification of opportunities in the community to participate in this activity. Current trends in fitness and conditioning, Components total health, Fitness and relationship between physical activity and lifelong wellness.

Unit II - Concept of Health and Health Problems

Concept, Dimension, Spectrum and Determinants of health, Definition of Health Educations, Health Instruction, Health Supervision Aims and objectives Principals of Health education, Health Service and guidance instruction in hygiene.

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 school; Health Services - Care of skin, Nails, Eye health service, Nutritional service, Health appraisal, record, Healthful school environment, first-aid and emergency care etc.

Unit - III Hygiene and Health

Meaning of Hygiene, Types of Hygiene, Dental Hygiene Effect of Alcohol on Health. Effect of tobacco on Health, Life style Management of Hypertension, Obesity and stress.

Unit IV- Climatic conditions and sports performance and ergogenic aids.

Variation in Temperature and humidity - Thermoregulation - Sports performance in hot climate, Cool Climate, High altitude. Influence of; Amphetamine, Anabolic steroids, Androstenedione, Beta Blocker, Chlorine, Creatine, human growth hormone o sports performance. Narcotic, Stinulants: Amphetamines, Caffeine, Ephedrine, Sympathomimetic amines. Stimulants and sport performance.

REFERENCE:

David K. Miller & T. Allen, Fitness, A life time commitment, Surjeet Publication Delhi 1989. Dificore judy, the complete guide to the postnatal fitness, A & C Black Publishers Ltd. 35 Bedford. row, London 1998 Dr. A.K. Uppal, Physical Fitness, Friends publications (India), 1992. Warner W.K. Oeger & Sharon A. Hoeger, Fitness and Wellness, Morton Publishing Company, 1990.

Fitness and Wellness, Morton Publishing Company, 1990.

Elizabeth & Ken day, Sports fitness for women, B.T. Batsford Ltd, London 1986.

Emily R. Foster, karyn Hartiger & Katherine A. Smith, Fitness Fun, Human Kinetics Publishers 2002.

Lawrence, Debbie, Exercise to music. A & C Black Publishers Ltd. 37, Sohe Square, London 1999

Robert Malt. 90 day fitness plan, D.K. Publishing, Inc. 95, Madison Avenue, New York 2001.

Bucher, Charles A. "Administration of health and physical education Programme". Delbert, Oberteuffer, et. al. "The School Health Education."

Ghosh, B.N. "treaties of Hygiene and Public Health".

PROF. RAJENDRA SINGH (RAJJU BHAIYA) UNIVERSITY, PRAYAGRAJ

Hanlon, John J. "Principles of Public Health Administration " 2003 Turner, C.E. "The School Health And Health Educations".

Moss and et. At. "Health Education " (National education Association of U.T.A.) Nemir A. "The School Health Education "(Harber and Brothers, New York). Nutrition Encyclopedia, edited by Delores C.S. James, The gale Group, Inc.

Body-Eaton S. et al (1989) the stone Age Health Programme: Diet And Exercise as Nature Intended. Angus and Robertson.

Terras S. (1994) Stress, How Your Diet can Help: The principal Guide to positive Health Using Diet, Vitamins, Minerals, herbs and Amino Acids, Thorons.

Health Education and Sports Nutrition, Prof. Pawan Kumar Pachori, Manisha Publications, Kadipur, Delhi, 2018

खेल एवं स्वास्थ्य शिक्षा, प्रो० दीप्ति शुक्ला, प्रो० पवन कुमार पचौरी, बिलवेडियर प्रेस, इलाहाबाद, 2018

खेल में चोटें असमान्य अंग विन्यास लक्षण व उपचार, मसाज थेरेपी एवं संतुलित आहार, प्रो० पवन कुमार पचौरी, इन्सीगनिया पब्लिकेशन्स, नई दिल्ली, 2022

PHYSIOLOGY OF EXERCISE

UNIT I - Skeletal Muscles and Exercise

Macro & Micro Structure of the Skeletal Muscle, Chemical Composition, Sliding Filament Theory of muscular Contraction. Types of muscle Fibre. Muscle Tone, Chemistry of muscular Contraction - Heat Production in the Muscle, Effect Of exercises and training on the muscular system.

UNIT II - Cardiovascular System and Exercise

Heart valves and Direction of the Flow - Conduction System of the Heart - Blood Supply to the Heart - Cardiac Cycle - Stroke Volume - Cardiac Output - Heart Rate - Affecting Heart rate - Cardiac Hypertrophy - Effect of exercises and training on the Cardio vascular system.

UNIT III - Respiratory System and Exercise

Mechanics of Breathing - Respiratory Muscles, Minute Ventilation - Ventilation at Rest and during exercise. Diffusion of Gases - Exchange of gases in the Lungs - exchange of Gases in the Tissues - Control of Ventilation - Ventilation and the Anaerobic Threshold. Oxygen Debt - Lung Volumes and Capacities - Effect of Exercises and Training on the respiratory system.

UNIT IV - Metabolism and Energy Transfer

Metabolism - ATP _ PC or Phosphagen System - Anaerobic Metabolism - Aerobic Metabolism - Aerobic Metabolism _ Aerobic and Anaerobic Systems during rest Exercise. Short Duration High Intensity Exercises - High Intensity Exercise Lasting Several Minutes _ Long Duration Exercises.

Note: Laboratory Practical in Physiology the designed and arranged Internally.

Beotra Alka, (2000) Drug Education Handbook on Drug Abuse in PSorts: Sports Authority of India Delhi.

Clarke, D.H. (1975). Exercise Physiology. New Jersey : Prentice Hall Inc., Englewood Cliffs.

David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.

Fox, E.L., and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.

Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co. Richard, W. Bowers. (1989). Sports Physiology. WMC: Brown Publishers.

Sandhya Tiwarji. (1999). exercise Physiology. Sports Publishers.

Shaver, L. (1981). Essentials of Exercise Physiology. Sports Publishers.

Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication. William, D.

Mc Aradle (1996). Exercise Physiology, Energy, Nutrition and Human Performance.

Philadelphia: Lippincott Williams and Wilkins Company.

RESEARCH METHODOLOGY IN PHYSICAL EDUCATION AND SPORTS SCIENCES

UNIT I - Introduction

Meaning and Definition of Research - Need, Nature and scope of research in physical Education.

Classification of Research, Location of Research Problem, Criteria for selection of a problem, Qualities of a good researcher.

UNIT II - Methods of Research

Descriptive Methods of Research; Survey study, Introduction of historical Research, Steps in Historical Research, Sources of Historical Research. Primary data and Secondary Data, historical Criticism and External Criticism.

Experimental Research- Meaning Nature and Importance, Meaning of variable, Type of Variables.

Experimental Design - Single Group Design, Reserve Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design, Factorial Design.

UNIT III - Sampling

Meaning and definition of Sample and Population. Types of sampling: Probability Methods; Systematic Sampling, Cluster sampling, Stratified Sampling. Area sampling - Multistage sampling. Non - Probability Methods; Convenience Sampling, Judgment Sampling Quota Sampling.

UNIT IV - Research Proposal and Report

Cauterization of Thesis / Dissertation, Front Materials, Body OF thesis- Back Materials. Method of Writing Research proposal, Thesis Dissertation; Method of writing abstract and full paper for presenting in a conference and to publish in journals, Mechanics of writing Research Report, Footnote and Bibliography writing.

REFERENCE

Best J. w (1971) Research in Education, New Jersey; Prentices Hall, Inc

Clarke David. H & Clarke H, Harrison (1984) Research processes in physical Education, New jersey; Prentice Hall Inc.

Craig Williams and Chris Wragg (2006) Data Analysis and research for sport and Exercise Science, London Rutledge Press

Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illonosis; Human Kinetics;

Kamlesh, M.L. (1999) Research Methodology in Physical and Sport, New Delhi

Moses, A.K. (1995) Thesis Writing Format, Chennai; Poompugar Pathippagam

Rothstain, A (1985) Research Design and Statistics for physical Education, Englewood Cliffs: Prentice Hall, Inc.

Subramanian, R, Thirumalai Kumar & Arumugam C (2010) Research Methods in Health, Physical Education and Sports New Delhi; Friends Publication.

Moorthy A.M. Research Processes i physical education (2010); Friend Publication, New Delhi.

Research Methodology in Physical Education and Sports Science, Prof. Pawan Kumar Pachori, Mansiha Publications, New Delhi, 2020

शासीरिक शिक्षा में अनुसंधान प्रविधियाँ, प्रो० पवन कुमार पचौरी, मनीषा पब्लिकेशन्स, नई दिल्ली, 2021

TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

UNIT I - Introduction

Meaning and Definition of Test, Measurement and Evaluation. Need and importance of Measurement and Evaluation. Criteria for test selection - Scientific Authenticity. Meaning, definition and Establishing - Validity, Reliability, Objective . Norms - Administrative Considerations.

UNIT II - Physical Fitness and Motor Fitness Tests

Physical Fitness Test: AAHPERD Health related fitness battery (revised in 1984), ACSM Health Related Physical Fitness test, Roger's Physical Fitness Index Cardio Vascular test; Harvard step test, 12 minutes run work / walk test, Multi- stage fitness test (Beep test)

Meaning and definition of motors fitness test for motor fitness; Indiana Motor Fitness Test (for elementary and high school boys, Girls and college Men) Oregon Motor Fitness Test (separately for boys and girls) - JCR test. Motor Ability; Barrow Motor Ability Test - Newton Motor Ability Test - Muscular Fitness - Kraus weber Minimum muscular Fitness Test.

UNIT III - Anthropometric and Aerobic - Anaerobic Tests

Physiological testing: Aerobic Capacity: The Bruce treadmill Test protocol, 1.5 Mile Run Test For College age males and females. Anaerobic Capacity: Margaria-Kalamen Test, Wingate anaerobic Test, Anthropometric Measurements : Method of Measuring Height: Standing Height, Sitting Height, Method of measuring Circumference: Arm, Waist, Hip, Thigh. Method of Measuring skin folds: Triceps, Sub scapular, Suprailiac.

UNIT IV - Skills Tests

Specific sports skill test: Badminton: Millar Wall Volley Test. Basketball: Johnson test, Harrison Basketball Ability test. Cricket: Sutcliff Cricket Test. Hockey: Friendel Field Hockey test, Harban's Hockey test, Volleyball, Russel Lange Volleyball Test, Brady volleyball test. Football: Mor-Christism General Ability skill Test Battery, Johnson Soccer Test, Mc- Donald Volley Soccer Test. Tennis: Dyer tennis Test.

Note: Practical of Indoors and out- door tests be designed arranged internally.

REFERENCES

- Authors Guide (2013) ACSM's Health related physical fitness assessment Manual, USA: ACSM publication.
Collins, R.D., & Hodges P.B. (2001) A Comprehensive guide to Sports Skills Tests and Measurement (2nd edition) Lanham: Scarecrow Press
Cureton T.K. (1947) Physical Fitness Appraisal And Guidance, St. Louis: The C. Mosby Company Getchell B (1979) Physical Fitness A way of life, 2nd Edition New York, John Wiley And Sons, Inc Jenson, Clayane R and Cunt ha, C. Hirst (1980) Measurement in Physical Education and Athletics, new York, Macmillan Publishing Co. Inc
Kensal D.K. (1996), "Test And Measurement in Sports and physical education, New Delhi: DVS Publications
Krishnamurthy (2007) Evolution in Physical Education and sports, New Delhi; Ajay Verma Publications
Vivian H. Heyward (2005) Advance Fitness Assessment and exercise:3rd Edition. Champaign IL: human Kinetics
Officiatingand Coaching, Prof. Pawan Kumr Pachori, Manisha Publications, Kadipur, Delhi, 2018
Yobu, A (2010) Test Measurement And Evaluation I Physical Education And Sports. New Delhi; Friends Publications

PAPER - V
SPORTS SOCIOLOGY

UNIT-I:

INTRODUCTION:

- (i) Nature, Scope and method of Sports Sociology.
- (ii) Sports as a special phenomenon.
- (iii) Sociological Analysis of Sports and Sports and Sports Sociology as an academic discipline.
- (iv) Social Factor (appearance, sociality, aspiration level and audience) inference on participation and performance in sports.

UNIT-II:

SPORTS AND MICRO SOCIAL SYSTEMS:

- (i) Study of sport groups.
- (ii) Group interaction, competition and cooperation.
- (iii) Behavior characteristics,
- (iv) Sports and Cultures.

UNIT-III:

SPORTS AND MACRO SOCIAL SYSTEMS:

- (i) Relationship between sport and socializing institutions (family, school and educational systems).
- (ii) Inter-relationship between and regulating institutions (Politics and economy).
- (iii) Sport and Cultural institutions (religion and art).
- (iv) Socialization via games and sports.

UNIT-IV

SPOPORTS AND CULTURE:

- (i) Sports as a Social institution.
- (ii) Sports an element of culture and a cultural product.
- (iii) Manipulative socialization an concerned conformity.
- (iv) Relationship between sports and culture.

UNIT-V

SOCIAL GAMES ONCERNING SPORT IN SOCIETY:

- (i) Social stratification in sports, as a stratificational system.
- (ii) Discrimination and democratisation in sport with speical reference to socio-economic classes and women.
- (iii) Sports and aggression, violence in sport.
- (iv) Problem regarding professionalization and children in sport.

REFERENCE:

1. Loy, John, W., Kenyon, gerald S. & McPherson, Barry D. Sports Culture and Society (Philadelphia: Lea & Febiger, 1981).
2. Ball, Donald W. and Loy W. Sport and social Order; Contribution to the sociology of sport (London: Addison Wesley Publishing Co., Inc., 1975).
3. Loy John, W. McPherson, Barry D., and Kenyon Gerald, sport and Social System (London: Addison Wesley Publishing Company Inc., 1978).
4. Edward Larry. Sociology of sport (Illionis: The Dorsey Press, 1973).

5. Cratty, Brayant J. Social Dimensions of physical Activity New Jersey: Englewood Cliffs, Prentice Hall Inc., 1967.
6. शारीरिक शिक्षा एवं खेल का समाजशास्त्र, प्रो० पवन कुमार पचौरी, प्रो० दीप्ति शुक्ला, आद्या पब्लिकेशन्स, शारदा नगर, सहारनपुर, उ०प्र., 2015-16

TRACH AND FIELD I RUNNING EVENTS / GYMNASTIC/SWIMMING (Any One)

UNIT - 1: Introduction

- Historical development of the game/sport at national and international levels.
- National Bodies controlling game/sport and their affiliated units.
- International Bodies controlling game/sport and their affiliated units.
- Major National and International Competitions i Game/Sport.
- Layout and marking of play filed/ground/court and measurement of equipments used in Game/Sport.

UNIT-II: Techniques/Skills development

- Classifications of techniques/skills.
- Technique/skill training: Preparatory, Basic, Supplementary exercises.
- Identification & Correction of faults.
- Training for mastery in technique/skill.
- Recreational and lead-up activities.
- Warm-up and cool down for game/sports.

UNIT-III: Officiating:

- Mechanics of officating.
- Qualities of good official.
- Duties of official (pre, during and post game)
- Rules & their interpretations.

UNIT- IV: Training (means & Method)

- Training methods and means for the development of motor abilities (Strength, Speed, Endurance and Flexibility)
- Basic Concept of preparation of training schedules.
- Tactical training in game/sport.
- Psychological preparation required during competition in game/sport.
- Preparation of short term and long term training plans in game/sport.
- Periodization in training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

TEACHING LEARNING STRATEGIES: The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

ACTIVITIES: Lecture//Laboratory Work/Filed/ Work/ Outreach Activities/Project Work/Vocational Traning/Viva/Seminars/Term Papers/Assignments/Presentations/Self-Study etc.

ASSESSMENT RUBRIC: Classroom Test, Performance Test, Project Work, Assignments, Presentations, Practical Work

SUGGESTD READINGS

Latest Official Rule Books of International Federations of particular game/sport and Coaching manuals will be utilized.

**COMBATIVE SPORT: BOXING/KARATE/TAEKWONDO/JUDO/WRESTLING/FENCING/
LATHI**

UNIT- 1: Introduction

- Historical development of the game/sport at national and international levels.
- National Bodies controlling game/sport and their affiliated units.
- International Bodies controlling game/sport and their affiliated units.
- Major National and International competitions in Game/Sport.
- Layout and marking of play field/ground/courts and measurement of equipments used in Game/Sport.

UNIT - II: Techniques/Skills development

- Classification of techniques/skills.
- Technique/skills training: Preparatory, Basic, Supplementary exercises.
- Identification & Correction of faults.
- Training for mastery in technique/skill.
- Recreational and lead-up activities.
- Warm-up and cool down for game/sports.

UNIT-III: Officiating:

- Mechanics of officiating.
- Qualities of good official.
- Duties of official (pre, during and post game)
- Rules & their interpretations.

UNIT- IV: Training (Means & Method)

- Training methods and means for the development of motor abilities (Strength, Speed, Endurance and Flexibility)
- Basic Concept of Preparation of training schedules.
- Tactical training in game/sport.
- Psychological preparation required during competition i game/sport.
- Preparation of short term and long term training plans in game/sport.
- Periodization in training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

TEACHING LEARNING STRATEGIES: The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

ACTIVITIES: Lecture// Laboratory Work/ Filed Work/ Outreach Activities/ Project Work/Vocational Training/Viva/Seminars/ Term Papers/Assignments/Presentations/Self-/Study etc.

ASSESSMENT RUBRIC: Classroom Test, Performance Test, Project Work, Assignments, Presentations, Practical Work

SUGGESTED READINGS

Latest Official Rule Books of International Federations of particular game/sport and Coaching manuals will be utilized.