

**REGULATIONS AND CURRICULUM
STRUCTURE FOR THE DEGREE OF MASTER
OF PHYSICAL EDUCATION (M.P.ED.)**

**TWO –YEAR TEACHER EDUCATION PROGRAMME
(W.E.F. 2021-2023)**

**AS PER
NCTE REGULATIONS, 2014
(GOVT. OF INDIA GAZETTE NOTIFICATION NO. 346, DT. 01.12.2014)**

**UNIVERSITY OF KALYANI
DEPARTMENT OF PHYSICAL EDUCATION
KALYANI, NADIA
WEST BENGAL
741235**

UNIVERSITY OF KALYANI
DEPARTMENT OF PHYSICAL EDUCATION

Details Course Structure for Master of Physical Education (M.P.Ed)

Semester – I

Course Code	Subject	Internal Exam	Sem-End Exam	Total Marks	Credit
	Part A: Theory Course	Marks	Marks		
MPCC-101	Physical Fitness, health and Wellness	30	70	100	3
MPCC-102	Physiology of Exercise	30	70	100	3
MPCC-103	Research Methodology in Physical Education and Sports Science	30	70	100	3
MPEC-101	Test Measurement and Evaluation in Physical Education and sports Sciences	30	70	100	3
MPEC-102	Sports Technology	30	70	100	3
	Part B: Practicum				
MPPC-101	Track & Field-I: Sprint Middle & Long Distance Running , Relay and Hurdles	30	70	100	3
MPPC-102	Sports Major-I: Swimming and Gymnastics (Fundamental skills, individual tactics, officiating & lead up games)	15+15=30	35+35=70	100	3
MPPC-103	Karate/Self Defense and Adventure Activities	15+15=30	35+35=70	100	3
MPPC-104	Class Room teaching Lessons (4+1) at least 1 from each theory subject and 1 final Lesson to be internally evaluated	(15×4)=60, (40×1)=40 Total 100		100	3
	Total	240	560	800	24

DEPARTMENT OF PHYSICAL EDUCATION
Course structure for Master of Physical Education (M.P.Ed.) Programme

Semester – II

Course Code	Subject	Internal Exam	Sem-End Exam	Total Marks	Credit
	Part A: Theory Course	Marks	Marks		
MPCC-201	Applied Statistics in Physical Education and Sports Science	30	70	100	3
MPCC-202	Yoga Education	30	70	100	3
MPCC-203	Nutrition, Sports Medicine & Athletic Care and Rehabilitation	30	70	100	3
MPEC-201	Sports Management	30	70	100	3
MPEC-202	Curriculum Designs in Physical Education	30	70	100	3
	Part B: Practicum and Teaching				
MPPC-201	Track & field-II, Shot put, Discus Throw, Javelin Throw, High Jump, Long jump and Triple Jump	30	70	100	3
MPPC-202	Sports Major-II: Basketball and Cricket (individual skills, games situations, officiating and lead up games)	15+15=30	35+35=70	100	3
MPPC-203	Yoga	30	70	100	3
MPPC-204	Teaching Lessons-Sports Major-4 Nos. and Track & Field-4 Nos.	30	70	100	3
	Total	240	560	800	24

In addition to conventional learning the students have be engaged/given exposure in the following practicum/student activity/ Seminar Assignment/Project File/Workshop/Volunteering etc. In addition to the number of hours mention in the table above, time has to be provided for Library Work, Self study, Planning, Field Visit, Taking up add on Course (Vocational Sports Education) and so on.

DEPARTMENT OF PHYSICAL EDUCATION
Course structure for Master of Physical Education (M.P.Ed.) Programme

Semester – III

Course Code	Subject	Internal Exam	Sem-End Exam	Total Marks	Credit
	Part A: Theory Course	Marks	Marks		
MPCC-301	Science of Sports Training	30	70	100	3
MPCC-302	Sports Journalism , Mass Media& Environmental Education	30	70	100	3
MPCC-303	Kinesiology & sports Biomechanics	30	70	100	3
MPEC-301	Adapted Physical Education and inclusive sports Education	30	70	100	3
MPEC-302	Sports Engineering and Technology	30	70	100	3
	Part B: Practicum and Teaching				
MPPC-301	Sports Major-III: Football and Badminton (individual skills, games situations, officiating and lead up games)	30	70	100	3
MPPC-302	Sports Major-IV: Volleyball and Handball (individual skills, games situations, officiating and lead up games)	30	70	100	3
MPPC-303	Officiating of Track & Field and Sports Activities –taught in Sem I,II, III & IV	30	70	100	3
MPPC-304	Internship/project work on practical activities	30	70	100	3
	Total	240	560	800	24
<p>In addition to conventional learning the students have be engaged/given exposure in the following practicum/student activity/ Seminar Assignment/Project File/Workshop/Volunteering etc. In addition to the number of hours mention in the table above, time has to be provided for Library Work, Self study, Planning, Field Visit, Taking up add on Course (Vocational Sports Education) and so on.</p>					

DEPARTMENT OF PHYSICAL EDUCATION
Course structure for Master of Physical Education (M.P.Ed.) Programme
Semester – IV

Course Code	Subject	Internal Exam	Sem-End Exam	Total Marks	Credit
	Part A: Theory Course	Marks	Marks		
MPCC-401	Information and communication Technology in Physical Edu. & Sports	30	70	100	3
MPCC-402	Sports Psychology	30	70	100	3
MPCC-403	Dissertation	30	70	100	3
MPEC-401	Gender Education & Value Education	30	70	100	3
MPEC-402	Kinanthropometry and Kinanthropometry Research in Physical Education.	30	70	100	3
	Part B: Practicum and Teaching				
MPPC-401	Hammer & Pole Vault, Combined Events, Decathlon, Heptathlon & Pentathlon; Triathlon	30	70	100	3
MPPC-402	Sports Specialization (one): Among track & field, Yoga & sports, Major (Technique of officiating, fundamental & advanced skill, Tactics, strategies, games practice & lead up Games)	30	70	100	3
MPPC-403	Coaching Lessons on Sport Specialization 5 Internal practice lessons & 1 Final Lesson	30	70	100	3
MPPC-404	Lab Practical (25 Marks in each subject) A) Physiology of Exercise B) Kinesiology & Sports Biomechanics C) Sports Psychology D) Measurement & Evaluation in Physical Edn.	30	70	100	3
	Total	240	560	800	24
** Anything covered in the regulations and curriculum structure Hon'ble Vice-Chancellor of the University shall have the authority to exercise his/her discretionary power from time to time					

**DEPARTMENT OF PHYSICAL EDUCATION
UNIVERSITY OF KALYANI
DETAILED SYLLABUS**

M.P.Ed. SEMESTER-I

Course Name: PHYSICAL FITNESS, HEALTH AND WELLNESS

Course Code: MPCC-101

Full Marks:70

Unit I : Physical Fitness

Meaning and Definition of Physical Fitness, Physical Fitness concept 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, 10 participate in this activity. Current trends in fitness inconditioning ,components of total health, fitness and relation between physical activity , and lifelong wellness.

Unit II- Concept of Health and Health Problems

Concepts, Dimensions, Spectrum and determinants of Health, Definition of Health Education, Health Instructions, Health Supervision, Aims and objectives, Principle of Health Education, Health Service and guidance instructions in personal hygiene.

Unit-III- Communicable Diseases

Communicable and Non Communicable Disease, Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive population, personal and environmental Hygiene for schools,. Objectives of school health service, Role of Health Education in schools, Health Service-Care of skin, Nails, Eye, Nutritional service, health appraisal, health Record. Healthful school environment, first-aid emergency care, Corona Virus etc.

Unit-IV- 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.

**DEPARTMENT OF PHYSICAL EDUCATION
UNIVERSITY OF KALYANI
DETAILED SYLLABUS**

M.P.Ed. SEMESTER-I

Course Name: PHYSIOLOGY OF EXERCISE

Course Code: MPCC-102

Full Marks: 70

UNIT- I Skeletal Muscles and Exercise

Macro and micro structure of skeletal muscle, Chemical composition, sliding filament theory of muscular contraction. Types of muscle fiber, Muscle tone, Chemistry of muscular contraction-heat production in muscle, Effects of exercise and training on muscular system.

UNIT II - Cardiovascular System and Exercise

Heart Valves and Direction of the Blood Flow - Conduction System of the Heart - Blood Supply to the Heart. - Cardiac Cycle - Stroke Volume - Cardiac Output - Heart Rate – Factors Affecting. Heart Rate Cardiac Hypertrophy - Effect of exercises and training on the Cardiovascular 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 Volume and Capacities - Effect of exercises and training on the respiratory system

UNIT IV - Metabolism and Energy Transfer Climatic conditions and sports performance and ergogenic aids

Metabolism- ATP-PC or Phosphagen System - Anaerobic Metabolism - Aerobic Metabolism Aerobic and Anaerobic Systems during Rest and Exercise, Short Duration High Intensity Exercises.

High Intensity Exercise Lasting Several Minutes - Long Duration Exercises. Variation in Temperature and Humidity - Thermoregulation - Sports performance in hot climate,

coolClimate, high altitude. Influence of: Amphetamine, Anabolic steroids, Androstenedione, Beta-blocker. Choline, Creatine, Human growth hormone of sports performance. Narcotic. Stimulants: Amphetamines Caffeine, Ephedrine, Sympathomimetic amines. Stimulants and sports performance.

**DEPARTMENT OF PHYSICAL EDUCATION
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M.P.Ed. SEMESTER-I

Course Name: RESEARCH METHODOLOGY IN PHYSICAL EDUCATION AND SPORTS SCIENCE

Course Code: MPCC-103

Full Marks: 70

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 problem, qualities of good researcher.

Unit II –Methods of Research

Descriptive Methods of research; Survey Study, Case study, Historical Research: Steps, source, Types of Data, and Criticism (Internal criticism and External criticism).

Experimental research – Meaning, nature and importance, Meaning of Variable. Types of Variables. Experimental Design-Single group Design, Reverse 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, Judgement sampling. Quota sampling.

UNIT IV –Research Proposal and Report

Chapterization of Thesis/Dissertation, Front Materials. Body of Thesis-Back Materials.

Method of Writing proposal. Thesis/Dissertation. Method of writing abstract and full paper for presentation in a conference and publish in journal. Mechanics of writing Research Report. Footnote and bibliography writing.

**DEPARTMENT OF PHYSICAL EDUCATION
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DETAILED SYLLABUS**

M.P.Ed. SEMESTER-I

Course Name: TEST MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

Course Code: MPEC-101

Full Marks: 70

UNIT- I Introduction

Meaning and Definition of Test. Measurement and Evaluation Need and Importance of Measurement and Evaluation Criteria for test selection- scientific Authentic. Meaning of definition and establishing - Validity, Reliability, Objectivity. Norms- Administrative consideration.

Unit II - Physical Fitness and Motor Fitness Tests

Physical Fitness Test: AAHPERD Health Related Fitness Battery (revised in 1984) ACSM Health Related Fitness Test, Roger's Physical Fitness Index. Cardiac vascular test: Harvard Step test, 12 minutes run/walk test, Multi-Stage Fitness test (Beep test), Yoyo Test, Intermittent Recovery Test

Meaning and definition of Motor 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)

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: Biceps, Triceps, Sub scapular, Suprailiac.

UNIT IV -Skill Tests

Specific Skill Test: Badminton: Miller Wall Volley Test. Basketball: Johnson Basketball 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-Christran General Soccer Ability Skill Test Barrey Jhonson Soccer Test, McDonald Volley Soccer Test. Tennis: Dyer Tennis Test.

**DEPARTMENT OF PHYSICAL EDUCATION
UNIVERSITY OF KALYANI
DETAILED SYLLABUS
M.P.Ed. SEMESTER-I**

Course Name: SPORTS TECHNOLOGY
Course Code: MPEC-102
Full Marks: 70

Unit I — Introduction

Meaning of Sports Engineering, human motion detection and recording. human performance assessment. equipment and facility designing and sports related instrumentation and measurement.

Football and Cricket ; Measurements, construction of goal posts, preparation of pitch and outfield, demarcation of boundaries, ground conditioning, rain water removal

Badminton, volleyball handball: Grass, clay, hard, synthetic courts, measurements, control of air draughts. Indoor courts – height, ventilation, illumination,

UNIT II- Mechanics of Engineering Materials

Concept internal force, axial force. shear force, bending movement, torsion. energy method to find displacement of structure, strain energy. Biomechanics of daily and activities —Gait, Posture. Body levers, ergonomics. Mechanical principles in movements such as lifting. walking. running, throwing, jumping. pulling, pushing etc.

UNIT III- Sports Dynamics

Introduction to Dynamics, Kinematics of particles rectilinear plane and curvilinear motion Coordinate system. Kinetics of particles Newton's laws of Motion. Work. Energy, Impulse and momentum

UNIT IV- Infrastructural Development

Sports Infrastructure- Gymnasium. Pavilion. Swimming Pool. Indoor Stadium. Out-door Stadium. Play Park. Academic Block. Administrative Block. Research Block. Library. Sports Hostel. etc.

Requirements: Air ventilation. Day light, Lighting arrangement. Galleries, Store rooms. Office. Toilet Blocks Drinking Water, Sewage and Waste Water disposal system. Changing Rooms (M/F). System (echo-free). Internal arrangement according to nature of performed activity, Corridors and Gates for free movement of people, Emergency provisions of lighting, fire exits. Eco-friendly outer surrounding. Maintenance financial consideration.

REFERENCES

1. Franz K. F. et. al.. Editor, Routledge Handbook of Sports Technology Engineering (Routledge. 2013)
2. Steve Hake, Editor. The Engineering of Sport (CRC Press, 1996)
3. Franz K. F. et. al., Editor The Impact of Technology on Sports II (CRC Press, 2007)
Helge N..Sports Aerodynamics (Springer Science & Business Media. 2009)
4. Youlin Hong, Editor Routledge Handbook of Ergonomics in Sport and Exercise (Routledge,2013)
5. Jenkins M., Editor Materials in Sports Equipment, Volume I Elsevier. 2003) Cohn White. Projectile Dynamics in Sport: Principles and Applications
6. Eric C. et al.. Editor Sports Facility Operations Management (Routledge. 2010)

M.P.Ed. SEMESTER-I
Practicum Course

Course Name: Track & Field I (Running Events)

Course Code: MPPC-101

Running Events-

1. Fundamental skills-Short and Middle distance
 - Use of starting blocks-stance on the blocks.
 - Body position at the start –starting technique, change in body position during running, movements of the arms, stride length and frequency, position of torso while running and at finish.
2. Advanced skills – Various techniques of sprint start: Bullet start, standing start.
3. Active game practice.

Course Name: Sports Major I (Gymnastics/Swimming)

Course Code: MPPC-102

1. Swimming: a) Free Style
 - b) Breast Stroke
 - c) Butterfly Stroke
 - d) Back Stroke
2. Gymnastics.

Course Name: Karate/Self Defense and Adventure Activities

Course Code: MPPC-103

Course Name: Class room teaching lessons.

Course Code: MPPC-104

DETAILED COURSE STRUCTURE

M.P.Ed. SEMESTER-II

Part- A: Theory Course

Course Name: Applied Statistics in Physical Education and Sports

Course Code: MPCC-201

Full Marks: 70

Unit- I: Introduction & Descriptive Statistics

- 1.1 Meaning and Definition of Statistics. Function, need and importance of Statistics. Types of Statistics. Meaning of the terms, Population, Sample, Data, and Types of data.
- 1.2 Variables; Discrete, Continuous. Parametric and Non-parametric statistics. Meaning, uses and construction of frequency table. Meaning, Purpose
- 1.3 Calculation and advantages of Measures of central tendency – Mean, Median and Mode.
- 1.4 Measures of Variability. Meaning, purpose, calculation and advances of Range, Quartile Deviation, Mean Deviation and Standard Deviation.

Unit-II : Probability Distribution and Graphs

- 2.1 Normal Curve, Meaning of probability –Principle of normal curve- Properties of normal curve. Divergence from normality Skewness and Kurtosis, Binomial Theory.
- 2.2 Sampling Theory : Mathematical and graphical representations of π , χ^2 ($=\sum\pi^2$), $t(\pi/\chi^2)$, $F(=\chi^2/1/\chi^2)$ statistics and use of statistical tables. Analysis of variance (Mathematical), If computer softwares are taught, the details of calculations should be made clear. Latin Square.
- 2.3 Graphical Representation is Statistics, Line diagram, Bar diagram, Histogram, Frequency Polygon, Ogive Curve
- 2.4 Standard Error, Meaning Purpose, Calculation and advantages of scoring

Unit-III : Inferential and Comparative Statistics

- 3.1 Test of significance, Independent “t” test

- 3.2 Chi- square test, level of confidence and interpretation of data
- 3.3 Concept of ANOVA and ANCOVA
- 3.4 Scales- Sigma scale, Z-scale, Hull scale

Unit-IV :Inferential and Correlative Statistics

- 4.1 Meaning of correlation – Co-efficient of correlation, Magnitude of co-efficient of correlation, Rank difference method.
- 4.2 Calculation of coefficient of correlation by Product Moment Method- group data, ungroup data
- 4.3 Concept of regression correlation
- 4.4 Partial correlation as multiple correlation

Reference

- 1. Best J. W (1971) Research in Education, New Jersey, Prentice Hall, Inc
- 2. Clark D.H. (1999) Research Problem in Physical Education 2nd Edition, Eaglewood Cliffs, Prentice Hall, Inc
- 3. Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illinois; Human, Kinetics,
- 4. Kamlesh, M.L. (1999) Research Methodolgy in Physical Education and sports, New Delhi
- 5. Rothstain A (1985) Research Design and Statistics for Physical Education, Eaglewood Cliffs, Prentice Hall, Inc
- 6. Sivaramakrishnan, S. (2006) Statistics for Physical Education, Delhi, Friends Publication
- 7. Thirumalaisamy (1998), Statistics in Physical Education, Karaikudi ,Senthilkumar Publications.

Course Name: YOGA EDUCATION

Course Code: MPCC-202

Full Marks: 70

Unit I : History of Yoga

- 1.1 Yoga in ancient India
- 1.2 Yoga during Pre Classical, Classical and Post Classical period
- 1.3 Modem Yoga

1.4 Yoga in the West

Unit - 2 Foundation of Yoga

2.1 Meaning and Definition Aim and Objectives of Yoga,

2.2 The Yoga Sutras: General Consideration

2.3 The Schools of Yoga Karma Yoga, Raja Yoga, Jnana Yoga Bhakti Yoga and Hatha Yoga and Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi.

2.4 Need and Importance of Yoga in Physical Education and Sports

Unit - 3 Yoga Therapy

3.1 Difference between yogic practices and physical exercises

3.2 Classification and benefits of Asanas with reference to Health, Posture and Fitness.

3.3 Effect of Asanas and Pranayamas on various systems of the body

3.4 Types of Bandhas, Mudras and Kriyas and their therapeutic implications.

Unit-4 Applied Yoga

4.1 Yoga as active healthy life

4.2 Yoga for different age groups and children, adolescent, Women and elderly Population.

4.3 Yoga for stress management.

4.4 Yoga for mind-body Integration.

REFERENCES:

1. Brown, F. Y.(2000). How to use yoga. Delhi;Sports Publication.
2. Gharote, M. L. &Ganguly, H. (1988). Teaching methods for yogic practices. Lonavla: Kaivalyadhama.
3. Rajjan, S. M. (1985). Yoga strengthen of relaxation for sports man. New Delhi, Allied Publishers
4. Shankar, G (1998) Holistic Approach of Yoga, New Delhi, Aditya Publishers
5. Shekhar K .C. (2003) Yoga for Health, Delhi, Khel Sahitya Kendra
6. Gharote, M.L. Applied Yoga, Lonavla, Kaivalyadhama Swami Kuvalananda, Asanas, Kaivalyandhama, Lonavla, Maharastra.
7. Bonnic, I (1991): The Management of Sports, St. Louis Mosby Publishing Company, Park House, Bucher

9. Charles (1993), Management of Physical Education and Sports (10th ed.)

Course Name: NUTRITION, SPORTS MEDICINE &ATHLETIC CARE AND REHABILITATION

Course Code: MPCC - 203

Full Marks: 70

Unit I: Nutrition in Exercise and Sports

- 1.1 Elementary concept of nutrition and sports nutrition,Macro and micro nutrients,calorific value, Basic nutrition guidelines, Role of carbohydrate,protein and fatduring exercise, Roleof water and electrolytes during exercises. Sports Drinks.
- 1.2 Carbohydrate loading, Carbohydrate supplements during exercises, Nutrients asergogenic aids, Nutrients requirement for competitive sports- team sports, shortduration highintensity sports, long duration moderate intensity sports.
- 1.3 Concept of BMI, obesity and its hazard,Weight control-dieting & exerciseelementary concept and comparisonweight management programme for sporty child.
- 1.4 Concept of ACU, Diet survey-elementary concept, designing the diet plan-principle of formulation of athletic diet.

Unit - II Sports Medicine

- 2.1 Meaning and definition of sports medicine, Brief history of sports medicine,Importance of sports medicine, Development of Sports medicine as a subject
- 2.2 Rehabilitation -concept, goals and objectives of rehabilitation in sports. Therapeuticexercises-definition and principles, Different types of exercise – coordinationexercises, balance exercises, strengthening exercises, mobilization exercises, gaittraining, gymballexercises, kinetic chain exercises.
- 2.3 Sports Injuries: Concept and different types of injuries, acute and chronic injuries,causes, examples and physiological effects.
- 2.4 Therapeutic modalities-Definition and different types of therapeutic modalities.PRICE-basic concept, advantages and disadvantages of PRICE, PRICE

therapy-concept and applications, Aquatic therapy-concept and applications

Unit - III Sports Injuries

- 3.1 Principles pertaining to the prevention and treatment of sports injuries; Strain, Sprain, Dislocation, Fractures at different joints and muscles, Contusions, Bruises, Hard and Soft Tissue injuries
- 3.2 Head, Neck and spine injuries: causes and effects, Presentation or Spinal aratomic flexion, compression, hyper extension and rotation injuries.
- 3.3 Upper extremity injuries: Upper limb and thorax injuries. Shoulder injuries (Sprain, Strain, Dislocation and Strapping), Elbow (Sprain, Strain, Dislocation), Wrist and Finger (Sprain, Strain and Strapping).
- 3.4 Lower limb and Abdominal injuries: Hip-abductor strain, dislocation, Knee: abdominal muscle sprain and contusion. Specific injuries and their management-Tennis elbow, Achilles tendon rupture, jumpers knee and swimmers shoulder.

Unit - IV Care and Rehabilitation of Sports Injuries

- 4.1 Definition and goals of' rehabilitation, Rehabilitation programme, Rehabilitation exercise, passive, active, resisted. Stretching different types PNF techniques and principles and application in sports.
- 4.2 Care and treatment of exposed and unexposed injuries in sports, principles oftherapeuticmodalities.Heat therapy (**Whirlpool bath, Wax Paraffin bath, Fluidotherapy, Diathermy, Ultrasound, Infrared-Rays**), Hydrotherapy(**Contrast Therapy, Steam bath**),Electrotherapy(**TENS,IFC,NNES,EMS,ESTR**), Cryotheraphy - principles, physiological effect-and specificapplications in sports.
- 4.3 Cardiopulmonary emergencies, Shock and internal injuries, First Aid-coldapplications. Useof crutch and stretcher, Principles emu techniques of strapping andbandages.Commonorthotic aids and protective equipments in spurts.
- 4.4 Massage- as an aid for relaxation, physiological, psychological effects,contraindications classification of the manipulative use of massage in human body-stroking manipulation,tapotement, hacking clapping beating, pounding slapping, cupping, poking shakingmanipulation and deep massage.

REFERENCES:

1. Christopher M. Norris. (1993). Sports Injuries Diagnosis and Management for Physiotherapists. East Kilbride: Thomson Litho Ltd.
2. James, A. Gould & George J. Davies. (1985). Physical Therapy. Toronto: C. V. Mosby Company.
3. Morris B. Million (1984) Sports Injuries and Athletic Problem. New Delhi: SurjeetPublication. Pande . (1998). Sports Medicine. New Delhi: Khel Shitya Kendra
4. The Encyclopedia of Sports Medicine. (1998). The Olympic Book of Sports Medicine, Australia: Tittel Blackwell Scientific publications.
5. Doherty, J. Meno, Wetb, Moder D (2000) Track & Field, Englewood Cliffs, Prentice Hal Inc. Lacey, M. V. (1951) Massage and Medical Gymnastics, London: J & A Churchill Ltd.
6. Me Ooyand Young (1954) Tests and Measurement, New York: Appleton Century.
7. Naro, C. L. (1967) Manual of Massage and, Movement, London: Febra and Febra Ltd.
8. Rathbome, J.I. (1965) Corrective Physical education, London: V.B. Saunders & Co.
9. Stafford and Kelly, (1968) Preventive and Corrective Physical Education, New York.

Course Name: Sports Management

Course Code: MPEC-201

Full Marks: 70

UNIT –I Introduction

- 1.1 Brief History of Sports Management, Philosophical aspects of Sports Management
- 1.2 Definition, Scope and Importance of Sports Management

UNIT –II Programme Management and Office Management

- 2.1 Importance of programme development and role of management, Factors influencing programme development steps in programme development
- 2.2 Comparative Sports Programme, Benefit, Management Guidelines for school, college sports programme
- 2.3 Management problems in instruction programme. Community based Physical Education and Sports programme
- 2.4 Definition, Importance and function of office management, office space

UNIT –III Equipment Management and Public Relation

- 3.1 Purchase and care of equipment
- 3.2 Guide line for selection of Equipments and supplies, Equipment Room, Equipment

and Supply Manager.

- 3.3 Guideline for checking, storing, issuing and Equipments care and maintenance of Equipment.
- 3.4 Public relation in Sports: Planning the Public Relation Programme - Principles of Public relation Public Relation in School and Communities - Public Relation and Media,

UNIT-IV Office Management and Sports Marketing, Records and Register

- 4.1 Importance and Functions of Office Management
- 4.2 Relation of Administration to Office Staff Members and Office Space, Personnel, Equipments and Supplies.
- 4.3 Budget: Meaning, Importance of Budget making, Criteria of a good Budget, Sources of Income, Expenditure, Preparation of Budget.
- 4.4 Administrative routine, Records and Reports,

REFERENCES:

1. J. Bonnie, L. (1991). The Management of Sports. St Louis: Mosby Publishing Company, Park house.
2. Boucher, A, Charles. (1993). Management of Physical Education and Sports (10thEd.) St. Louis: Mobsy Publishing Company.
3. Samiran, M. (1998). Sports Management. New Delhi: Sports Publication
4. Charles A, Bucher, March L. Krotee(1993), Management of Physical Education and Sports. SI. Louis: Mosby Publishing Company,
5. Chelladuari, P. (1999). Human Resources Management in Sports and Recreation. Human Kinetics.

**DEPARTMENT OF PHYSICAL EDUCATION
UNIVERSITY OF KALYANI
DETAILED SYLLABUS
M.P.Ed. SEMESTER-II**

Course Name: CURRICULUM DESIGNS IN PHYSICAL EDUCATION

Course Code: MPEC-202

Full Marks: 70

UNIT-1 DEFINITION, MEANING OF TERM CURRICULUM

- 1.1 Curriculum Organization.
- 1.2 Curriculum Models.
- 1.3 Role of Teacher in Curriculum Development.

1.2 Importance of Curriculum Development:

- 1.2.1 Factor affecting Curriculum.
- 1.2.2 Changing Need of Student.
- 1.2.3 National and Professional Policies.

1.3 Approaches Curriculum Development.

- 1.3.1 Models of Curriculum Development.
- 1.3.2 Steps in curriculum Construction.
- 1.3.3 Curriculum Implementation.

1.4 Classification of Physical Education Activities as per Age, Group, and Sex.

- 1.4.1 Understanding the capacity characteristics and needs of the learner,
- 1.4.2 Evaluation and Follow.

UNIT-II PRINCIPLES OF PLANNING

- 2.1.1 Goal Setting.
- 2.1.2 Development of Instructional Objectives.
- 2.1.3 Learning Domains.
- 2.2 Co-education in Physical Education.
- 2.2.1 Integrating Programmes for Boys and Girls.
- 2.2.2 Activities suitable for Co-education.
- 2.2.3 Levels at which co-education is Desirable.

UNIT-III TEACHING STYLES AND STRATEGIES:

3.1 Definition and importance of teaching Styles.

- 3.2.1 Teaching Styles.
- 3.2.2 Factors in Selection of a Teaching Styles.
- 3.2.3 Importance of Communication skills, Effective Presentation, and Effective

Demonstration,

3.2.4 Strategies to enhance student Motivation.

3.2.5 Disciplinary Strategies in Physical Education.

UNIT-IV DEVELOPMENT OF PROGRAMME AND EVALUTION IN PHYSICAL EDUCAION

4.1 Kindergarten, Elementary School, Middle School, Colleges and Universities.

4.2 Special Institutions (Technical School, orphan Hostel) 5.3 Special Days, National Days.

4.2 Evaluation in Physical Education:

4.2.1 Role of Evaluation in Physical Education.

4.2.2 Types of Evaluation, Informal Evaluation, Objective, Evaluation, Subjective Evaluation and Norm Reference Evaluation.

REFERENCE:-

1. Synder Albert Raymond & Scott, "Professional Preparation in Health, Physical Education & Recreation" (Greenwood press publisher, 1954).
2. Well Jenifer, Murray Kanij "Children & Movement: Physical Education in Elementary School" (W.M.C. Brown Publishers, Dubvgve, 1990).
3. Cowell C. Charles, Hazelton W. Hler, "Curriculum Design in Physical Education" (Englewood Cliffs N.J. Prentice Hall, Inc. 1995).
4. Wessel A. Janet, Keely Zuke "Achievement Based Curriculum Development in Physical Education" (Leas Febiger, Philadelphia, 1986).
5. Gupta Rakesh, Sharma Akhilesh and Sharma Santosh, "Professional preparation and Curriculum Designs in Physical Education & Sports", (Friends Publications (India) 2004).
6. Sandhu Kiran "Professional Preparation &Lureer Development in Physical Education & Sports", (Friends Publications (India) 2004).

Semester – II

Part- B: Practicum & Teaching

Course Code: MPPC:201

Track & Field.....

1. **Shot Put and types of techniques** : Holding the shot; placement; Throwing stance- Standing throw; Initial stance glide or disco put; Release action; Recovery,
2. **Discuss Throw types of techniques:**Holding the Discus, Initial stance, preliminary swing, Standing throw, Turn; release, Recovery,
3. **Javelin Throw types of techniques:**Holding the javelin, pegging, throwing stance; standing thro, Javelin carrying in running: last 5 or 6 steps (strides); Throwing stance; Delivery; Reverse.
4. **High Jump types of techniques:** Approach Run; Take off; Crossbar clearance-Western Roll, Straddle Roll,Fosbury Flop; Landing.
5. **Running Board Jump types of techniques:** Approach run; Take off; Flight-in-air-Hitch kick, Knee tuck; Landing,
6. **Triple Jump:** Approach Run; Techniques of Hop and Step; Take off; Flight. Landing

Course Code: MPPC- 202

SPORT MAJOR-II: BASKETBALL AND CRICKET (INDIVIDUAL SKILLS, GAMESITUATIONS, OFFICIATING AND LEAD UP GAMES)

BASKETBALL

1. **Fundamental Skills:**Player stance ,ball gripping and ball handling,
2. **Passing:** Two Hand Chest Pass, Bounce Pass, Over Head Pass, Base ball Pass, Side Ann
3. Pass, Hook Pass,
4. **Receiving:** Two Hand Receiving, Receiving in stationary position, Receiving while jumping, Receiving while running,

5. **Passing the ball with Partners:** Two Man Passing, Three Men Weaving, Five Man weaving,
6. **Dribbling:** How to start dribble, How to drop ball, High dribble, Low dribble, Reverse dribble, Changing dribble.
7. **Shooting:** Layup shot and its variations, Set shot, Jump shot, Hook shot, Free throw,
8. **Rebounding:** Defensive rebound, Offensive rebound, Knock out, Rebound Organization.
9. **Tactics:** Individual tactics, combined tactics and Group tactics, '
10. **Defense:** Zone defense, Man to Man defense- Individual defense, Guarding the man with the ball and without the ball.
11. **Pivoting.**
12. **Rules and their interpretation and duties of the officials**

CRICKET

1. **Fundamental Skills:**Batting, Bowling, Fielding
2. **Batting:** Grip, stance, back lift, straight bat, shot forward and backward defence, front foot and back foot, drive shot, cross bat short, pull, hook, square cut (on both feet)
3. **Bowling:** Fundamental of bowling, grip, run up delivery, follow through, types of bowling, wrist sewing, spin.....

Course Code: MPPC- 203

YOGA

1. Asanas

Sitting posture:Sukhasana, Padmasana, Vajrasana, Gornukh Asana, Janu Sirsasana, Ardha Mursyendrasana, Paschimottanasana, Usirasana. Sirsasana,

Standing Posture:Utkatasana, Garudasana, UuhitaTrikonasana, Vrksasana,Padangusthasana, Chakrasana.

Lying Posture: (Supine):Sabasana, Sarbangasana, Halasana, Naukasana, Matsyasana, SetuBandha Sarvangasana.

Lying Posture: (Prone):Salbhasana, Bhujangasana, Dhanurasana, Makarasana,

2. Pranayama

Basics of Pranayama: AnulombVilomb. SuryabhedanaPranyama, ChandrabhedanaPranayarna., Ujjayi Pranayama., Bhastrik a Pranayama, Kapulabhati Pranayama. BhramariPranayarna, Shitali and SheetkariPranayarna. Meditation, Religious and Spiritual Meditation,

Relaxation with Meditation,

3 Kriyas

Basics of Kriyas, Kapalabhati.

Neti: Jala Neti and Sutra Neti.

Nauli and its types Varna Nauli, DakshinaNauli.

Jala Dhouti Kriya or Vamana Dhouti Kriya.

4 Mudras and Bandhas

Basics of Mudras Types of Mudras: Gyan Mudra, ShoonyaMudra, ApanaMudra, Prana Mudra, Vayu Mudra, Prithvi Mudra, Varun Mudra, Surya Mudra, Ling Mudra Basics of

Bandhas, Different Types of Bandhas: Jalandhara Bandha, UddiyanBandha, Moolabandha

COURSE CODE: MPPC- 204

TEACHING LESSONS

1. Lesson on : Sports Major – 4 Nos. Credit: 1.5

2. Lesson on : Track and Field -4 Nos. Credit: 1.5

DETAIL COURSE STRUCTURE
M.P.ED. SEMESTER-III
PART A: THEORY COURSE

Course Name: SCIENCE OF SPORTS TRAINING

Course Code: MPCC 301

Full marks: 70

Unit I: Introduction in Sports Training

- 1.1 Meaning and definition of sports training and sports coaching, aims and characteristics of sports training.
- 1.2 Principles and Characteristics of Sports Training.
- 1.3 Means and Method of sports training
- 1.4 Talent identification of sports

Unit II: Training Load and Adaptation

- 2.1 Meaning, definition of Training load and components of training load and adaptation load distribution.
- 2.2 Principles of load and recovery
- 2.3 Training load and adaptation process. Concept of Super Compensation factors affecting recovery process
- 2.4 Concept of Overload, Cause of Overload, Symptoms of Overload and remedial measures of overload.

UNIT III - Components of Motor Fitness and Training Method

- 3.1 Strength: Meaning and Forms or Strength. Factors determining strength method,improve Strength- Weight Training, Isometric, Isotonic, Circuit Training,

- 3.2 Speed: Meaning and Forms of Speed, Factors determining speed. Methods to improve speed- Repetition method, Downhill Run, Parachute Running. Wind sprints (In's and Out's method) Pace Runs and Differential Paces,
- 3.3 Endurance: Meaning and forms of Endurance, Factors determining Endurance Method improve Endurance- Continuous method. Interval method. Repetition method Cross country. Fartlek Training, Altitude Training.
- 3.4 Coordinative Abilities and Flexibility: Method for developing Flexibility and coordinative abilities. Meaning and Forms. Factors determining coordinative abilities and Flexibility

UNIT IV - Periodization, Planning and Training Implication for Technique and Tactics

- 4.1 Periodization- Meaning and Types or Periodization. Different phases of Periodization and their contents.
- 4.2 Training plan- Meaning, Principles and types or Training Plan (Micro, Meso and Macro) Short term and Long Term Training Plan.
- 4.3 Technical and Tactical Training- Meaning or Technique and Tactics and Strategy Difference between Faeries and Strategy Different types of Tactics (Individual and Team Tactics). Different Phases of Technique & Tactics Learning & Training Implication for Technique and Tactics Learning
- 4.4 Types of doping and their bad effects.

REFERENCES:

1. Beotra Aika. (2000). Drug Education Handbook on Drug Abuse in Sports. Delhi: Sports Authority of India.
2. Bunn. J.N. (1998) Scientific Principles of Coaching. New Jersey Engle Wood Cliffs. Prentice Hall Inc.
3. Cart. C. Klafs & Daniel. D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C V. Mosphy Company
4. Daniel. D. Arnheim (1991) Principles of Athletic Training. St. Luis. Mosby Year Book
5. Dax David R. Mottram (1996) Drugs in SpOII. School of Pharmacy. Liverpool: John Moore University
6. Gary. T. Moran (1997) - Cross Training for Sports. Canada: Human Kinetics
7. Hardayal Singh (1991) Science of Sports Training, New Delhi. DVS Publications

8. Jensen. C.R. & Fisher A.G. (2000) Scientific Basic of Athletic Conditioning, Philadelphia

Course Name:SPORTS JOURNALISM, MASS MEDIA AND ENVIRONMENTAL EDUCATION

Course Code: MPCC-302

Full marks: 70

UNIT I: Sports Journalism

- 1.1. Sports Journalism-concept. Brief history about the emergence of the subject, objectives and obligation of sports journalism. Role of journalism in the field of physical education and sports. General news reporting and sports reporting. Organization of press meet. Press release.
- 1.2 Reporting of sports events- concept, different perspective, concept of creative writing in sports. Traditional and opensource reporting. Sports Bulletin, Concept and Structure. Type of bulletin, compiling a bulletin.
- 1.3 Report writing- concept and methods, structure of sports coverage in a news paper. Coverage of a match, and preparation of a annual sports meet for publication in the news paper. Methods of editing a sports report critical appraisal of reported news.
- 1.4 Brief review of Olympic Games, Asian Games, Commonwealth games, World cup. National and Indian traditional games. Interview with elite player and coaches-approach method. procedure. questionnaire Practical assignment to observe matches and prepare,report on the same.

UNIT II- Mass Media

- 2.1 Mass media- concept. characteristics and functions. Fundamentals of mass communicator-Definition. types, barriers and importance of mass communication. Translation theory concept. need and importance in mass communication.
- 2.2 Commentary- Essential skills required for commentary. Commentary methods. Running commentary on the radio. Sports expert's comments.
- 2.3 Role of advertisement in journalism. concept about news broad casting and its application Inthe field ofsports.Sports ethics and sponsorship.

- 2.4 Sports photography and telecasting. Equipments (brief concept about camera and photography), basic and color photography, composition of photography, editing and publishing of photographs related to sports events (practical assignment to be given to the students) Basic idea about telecasting.

Unit III: Environmental Education

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. Environmental and Pollutions: Air, water, soil and sound/noise and their control. Effects of pollution of natural resources on nutrition, Growth and Development, Health and Fitness

Unit IV: Rural and Urban health & Natural resources

Rural Health Problem, Causes of Rural Health Problems, Points to be kept in mind for improvement of Rural sanitation, Urban health problems, Process of Urban health, Services of Urban Area, Suggested Education Activity, Sanitation at Fairs & Festivals, Mass Education.

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.

REFERENCES:

1. Franz K, F, et. al. Editor. Routledge Handbook of Sports Technology and Engineering (Routledge. 2013)
2. Steve Hake, Editor. The Engineering of Sport (Ck C Press. 1996)
3. Franz K. F. et. al .. Editor The Impact of Technology on Sports II (CRC Press. 2007)
4. Helge N. Sports Aerodynamics (Springer Science & Business Media, 2009)
5. Youlin Hong. Editor Routledge Handbook of Ergonomics in Sport and

Exercise(Routledge.2013)

6. Jenkins M .. Editor Materials in Sports Equipment. Volume I Elsevier. 2003) Colin White,
7. Projectile Dynamics in Sport: Principles and Applications
8. Eric C. et al .. Editor Sports Facility Operations Management (Routledge, 2010)

Course Name: KINSIOLOGY AND SPORTS BIOMECHANICS

Course Code- MPCC -303

Full Marks: 70

UNIT-I Structural & Functional kinesiology.

- 1.1 Meaning Purpose, scope and importance of Kinesiology and Sports Biomechanics. History and development of kinesiology.
- 1.2 Bone and various joints in human body its classifications. Muscles and its Classification Two joint Muscle, Muscle contraction and its types. Role of muscles for movement generation. Muscle contraction and force production. Muscular action and movement coordination. Angle of Muscle Pull, Muscular attachments.
- 1.3 Neuromuscular Interaction and its role in movement generation, concept of motor unit and Gradation in the strength of muscular contraction. Meaning of AXIs and Plane characteristics and importance of body planes and axis.
- 1.4 Various Types at joint movements. Structure, functions and movements of various joints of human body.(Wrist. Elbow, Shoulder. HIP, Knee. Ankle, Spinal cord) Origin insertion and action of muscles in various joints (Anterior, Posterior and lateral)

UNIT-II Linear and angular Kinematics & Kinetics

- 2.1 Vectors and scalars. Concept of frame of Reference. Dynamics. Kinematics, Kinetics. Statics. Meaning and definition of Motion. Types of Motion: Linear motion, angular motion, Equations of motion. Graphical representation of motion, Relationship between Linear and angular kinematic parameters of motion.
- 2.2 Principles related to the law of Inertia. Law of acceleration. and law of counter force in linear and angular motion. Concept of momentum and conservation of momentum its application in physical education and sports, Meaning and definition of force-

Sources of force - Force components .Force applied at an angle -Torque, couple and moment of force, Moment of Inertia. Pressure.

- 2.3 Meaning of work, power, energy. kinetic energy and potential energy, Work done in angular motion. Conservation of energy.
- 2.4 Concepts of machine and its types Leverage -classes of lever Principle, Mechanical advantage and efficiency of machine Wheel-Axle & Pulley practical application.

Unit - III Internal & External Forces

- 3.1 Centripetal force - Centrifugal force. Centre of gravity – Line of gravity. Equilibrium and Stability. Condition of equilibrium Factors influencing equilibrium- Guiding principles for stability- static and dynamic stability.
- 3.2 Concept of Gravity and Newton's law of Gravity, Freely falling bodies – Projectiles Equation of freely falling bodies and projectiles . Application of projectiles in Physical Education in sports.
- 3.3 Friction- Concept and its different types Static, Kinetic and fluid Laws of friction, Application of friction in Physical Education and Sports.
- 3.4 Concept of elasticity Stress & Strain, Hooke's Law, Impact laws of impact, Laws of Rebound Coefficient of Restitution.

Unit –IV Fluid Mechanics & Analysis of Human Movement

- 4.1 Fluid mechanics-Types of flow, Viscosity, Relative motion of an object in fluid- Aerodynamics, skin friction. Form drag, Lift Wave drag, Effect of lift and drag on Performance.
- 4.2 Spin – Concept and different types of spin, spin. factors affecting spin. Magnus effect, Effect of spin on rebound.
- 4.3 Analysis of Movement- Types of analysis: Kinesiological Biomechanical Cinematographic Methods of analysis - Qualitative. Quantitative, Predictive
- 4.4 Application of different equipments and software in human movement analysis.

Note: Laboratory practicals should be designed and arranged for students internally

REFERENCES

1. Deshpande S.H.(2002). Manav Kriva Vigyan - Kinesiology (Hindi Edition) Amravati Hanuman Vyayam Prasarak Mandai.
2. Hoffman S. J. Introduction to Kinesiology (Human Kinesiology publication in.2005.
3. Steven Roy. & Richard Irvin. (1983). Sports Medicine. New Jersey: Prentice hall.
4. Thomas (2001). Manual or structural Kinesiology. New York: Me Graw Hill.
5. Uppal A.K. Lawrence Mamta MP Kinesiology(Friends Publication India 2004)
6. Uppal A.K (2004). Kinesiology in Physical Education and Exercise Science. Delhi Friends publications.
7. Williams (1982) Biomechanics of Human Motion. Philadelphia: Saunders Co.
8. Ghosh S.S. (2015) Gathangata Manav-Gatavidya (Structural Kinesiology) Clasique Book-Kolkata-12
9. Ghosh S.S. (2015) Manav-Gatavidya Jib-balavidya (Kinesiology 8: Biomechanics) Clasique Books. Kolkata-12

**DEPARTMENT OF PHYSICAL EDUCATION
UNIVERSITY OF KALYANI
DETAILED SYLLABUS
M.P.Ed. SEMESTER-III**

Course Name: ADAPTED PHYSICAL EDUCATION & INCLUSIVE SPORTS EDUCATION

Course Code: MPEC-301

Full Marks: 70

UNIT-I: Introduction to Disability/Inclusive Sport Education,

- 1.1 Meaning, Definition of Disability and handicapped, Adapted Physical Education- Definition, Purpose, Objectives and Important considerations.
- 1.2 Types of impairment and their Causes: Hearing impairment, Visual impairment. Orthopedically handicapped. Mentally Retarded, Cerebral palsy, Learning Disability Behavioral Disorder. Less Autres, other health impairment.
- 1.3 Exercises as remedial measure for various type of Disability, modified sports for the Disabled.
- 1.4 Govt. plan and action and Disability Act, Adapted Physical Education Programme,

Safety Needs.

Unit -II Humanism, assessment and Sports for Disabled Person

- 2.1 Humanistic Theory. Self-Actualization Theory, Social learning Theory.
- 2.2 Types of Assessment, Assessment procedure and purpose, Test Related to Assessment of Disability.
- 2.3 Sports for Handicapped. Special Olympic, Paralympics, National Organization for the Disabled.
- 2.4 Class organization, Facilities and Equipments, Competitions for the Disabled. Types of competition and their Participation. Fitness counseling, Placement of Disabled Individuals

UNIT-III: Introduction to Inclusive Education and Disability Sport Education

- 3.1 Concept and history of special education, integrated education, inclusive education
- 3.2 Disability Sport Education and their relationship
- 3.3 Philosophical, Sociological, Economical and Humanitarian dimensions of inclusive and disability sport education.
- 3.3 Meaning and definition of inclusive sport education and educational curriculum
- 3.4 Advantages of inclusive education and Disability Sport Education for the individual and society, Factors affecting inclusion and disability Sport Education

UNIT-IV: Sports for disabled

- 4.1 Class organization- facilities and equipments.
- 4.2 Sports for different types of disability
- 4.3 Exercises and remedial measures for various types of disabilities. modified sports for the disabled
- 4.4 Competitions for the disabled, types of competition and their participation. Fitness counseling, Role of common people for the disabled and disability act.

REFERENCES:

1. Franz K. F. et. al.. Editor. Routledge Handbook of Sports Technology and Engineering (Routledge. 2013)
2. Steve Hake, Editor, The Engineering of SpOII (CRC Press, 1996)

3. Franz K. F. et. al., Editor The Impact of Technology on Sports II (CRC Press, 2007)
4. Helge N., Sports Aerodynamics (Springer Science & Business Media, 2009)
5. Youlin Hong, Editor Routledge Handbook of Ergonomics in Sport and Exercise (Routledge. 2013)
6. Jenkins M., Editor Materials in Sports Equipment. Volume I Elsevier, 2003) Colin White. Projectile Dynamics in Sport: Principles and Applications
7. Eric C. et al., Editor Sports Facility Operations Management (Routledge, 2010)
8. Ahiya B.N. (1988) Theory and Practice of Journalism: Set to Indian context 3rd Ed. Delhi : Surjeet Publications
9. Ahiya B.N. &Chobra S.S.A. (1990) Concise Course in Reporting. New Delhi: Surjeet
10. Publication
11. Bhatt S.C. (1993) Broadcast Journalism Basic Principles. New Delhi. Haranand Publication
12. Dhananjay ,Joshi (2010) Value Education in Global Perspective. New Delhi: Lotus Press.
13. Karman K (2009) Soft Skills, Madurai: Madurai: Yadava College Publication
14. Mohit, Chakrabarti (2008): Value Education: Changing Perspective, New Delhi: Kanishka Publication,.
15. Padmanabhan. A &Perurnal. A (2009), Science and Art of Living. Madurai: Pakavathi Publication
16. Khera Shiv (2002), You Can Win, New Delhi: Macmillan India Limited.
17. Varma,A.K. (1993) Journalism in India from Earliest Times to the Present Period. Sterling publication Pvt. Ltd.
18. Venkataiah. N. (2009) Value Education.- New Delhi: APH Publishing Corporation.

COURSE NAME : SPORTS ENGINEERING AND TECHNOLOGY

COURSE CODE: MPEC-302

FULL MARKS : 70

UNIT-I: Introducing to Sports Engineering

Credit -0.75

- 1.1 Sports Engineering- Basic concept about the subject and development of the subject and discipline, importance in the field of sports science.

- 1.2 Ergonomics – basic concept about the subject, concept about the man, machine and environment. Application of ergonomics in designing of work place. Concept of work station.
- 1.3 Designing of sports equipment and facility. Sports related instrumentation designing and measurement (fitness gadgets and software application, protective equipments, designing helmet, pad, gloves)
- 1.4 Mechanics of engineering material concept of internal , axial , shear force bending movement, torsion, strain and energy.

UNIT-II: Infrastructural development

- 2.1 Idea about different types of Sports infrastructure: Gymnasium. Pavilion, Swimming pool. Indoor and Outdoor stadium. Play parks. Academic block. Administrative block. Research block. Sports hostel. and Library.
- 2.2 Requirements of Sports infrastructure: Air ventilation. Day light, Lighting arrangement. Galleries. Store rooms. Office. Toilet Blocks (male and female). Drinking water. Sewage and Waste water disposal system. Changing room (male and female). Echo free sound system. Internal arrangement according to need and nature of performed activity, Corridors and gates for free movement of people. Emergency provisions of lighting, fire and exits. Safety principles and guidelines of maintenance of sports infrastructure, Maintenance staff-their role and importance in maintaining infrastructure,

UNIT-III: Infrastructural maintenance

- 3.1 Building process and maintenance phase: Designing phase (including brief documentation). construction phase functional (occupational) life. Re-evaluation, Refurnish. Demolish Maintenance policy: concept. preventive measure, corrective maintenance, records and register for maintenance.
- 3.2 Surface Material dynamics: Different types of surface materials used in designing sports fields. Materials used in designing synthetic athletic track. turf ground. Astro turf. Poly grass. Importance of use of different types surface material in modern day sports.

UNIT-IV: Equipment and Dress codes:

Equipment:

Football: Evolution and fabrication of balls, Boots, use of cameras.

Cricket: Evolution and fabrication of balls, bats, stumps, batting and wicket-keeping gloves, pads, helmets. Positioning of cameras, microphones.

Badminton and Volleyball: Measurements and construction of rackets, shuttle croaks and volleyball. Net measurement etc.

Dress codes:

Dress code of players, umpires and spectators should be standardized and included in the curriculum.

Banned practices like using mirrors to reflect sunlight or bursting crackers should also be included.

SEMESTER-III

PART- B: PRACTICUM & INTERNSHIP

Course Code: MPPC-301

SPORTS MAJOR-III: FOOTBALL AND BADMINTON (INDIVIDUAL SKILL, GAME SITUATIONS, OFFICIATING AND LEAD UP GAMES)

FOOTBALL

1. **Kicking:** Push pass. Instep kick, Chip, High drive, Different types of volley, kick, bicycle kick, Flick in swing, Out swing
2. **Trapping or receiving:** Sole trap. instep , Inside of the foot, Outside of the foot, Chest &: Head.
3. **Heading:** Forward downward. Forward Upward, Sideway, Backward .
4. **Throw in:** Both Free parallel. One footforward. Running and Standing throw- for accuracy and Distance.
5. **Dribbling:** Inside and outside. Forward. instep feinting with and without the ball.
6. **Tackling:** Front. Side and Slide Tackling.
7. **Goal-Keeping:** Keeping a ground or a low ball. Catching high ball. Keeping chest high and overhead ball. Fisting. Diving.
8. **Passing:** Short. Long. Square. Through. Diagonal. Wall and overhead passes.
9. **Tactics:** Offensive & Defensive.
10. **Strategy:** 4-2-4.4-3-3 Sweeper system.
11. **Game Situations, Officiating and Lead-Up Games.**

BADMINTON

1. **Grip:** Forehand and Backhand Swing.
2. **Service:** Long. Short and Long high services. receiving.
3. **Strokes:** Forehand. Low forehand. Back Hand Drop shots. Li ft. Passing shot.
4. **Strategy & Tactics:** Single and Doubles Up and bad. play. Doubles formations and Parallel.
5. **Game Situations, Officiating and Lead-Up Games**

Course Code: MPPC- 302

SPORTS MAJOR-IV: VOLLEYBALL AND HAND BALL (INDIVIDUAL GAME SITUATIONS, OFFICIATING AND LEAD-UP GAMES)

VOLLEYBALL:

1. **Service:** Underarm. Sidearm. Spin. Tennis. Floater, Javelin and so on
2. **Passing:** Underarm forward, sideways, overhead and forward and groups
3. **Boosting:** Low, Straight high, Backward and Sideways
4. **Spiking:** Leg movement, killing with either hand
5. **Blocking:** Individual and Group Blocking
6. **Setting:** Straight and Different directions.
7. **Game Situations, Officiating and Lead-Up Games.**

HANDBALL:

1. **Passing:** Chest pass, Sidearm pass, Hook pass. Overhead Pass, Holding the ball, passing and inter passing in two, three etc.
2. **Shooting.** Shooting at the goal (Jump shot, jump & fall shot)
3. **Dribbling.** Individual dribbling and Dribbling against opponent. feinting.
4. **Goalkeeping.**
5. **Strategy & Tactics:** Offensive and defensive.
6. **Goal throw, Penalty throw.**
7. **Game Situations, Officiating and Lead-Up Games**

Course Code: MPPC- 303

OFFICIATING OF TRACK & FIELD AND SPORTS ACTIVITIES -TAUGHT IN SEM-I, II, III & IV

Course Code: MPPC- 304

INTERNSHIP / PROJECT WORK ON PRACTICAL ACTIVITIES

**DEPARTMENT OF PHYSICAL EDUCATION
UNIVERSITY OF KALYANI
DETAILED SYLLABUS
M.P.Ed. SEMESTER-IV**

Course Code: MPCC401

Course Name: ICT in Physical Education and Sports

Full Marks: 70

Unit I - Fundamentals of Computers

- 1.1 Basic structure of computer –hardware and software its types, concepts and applications, input output storage devices
- 1.2 Computer Memory Concept & Types(ROM-BIOS, RAM) and Its functions
- 1.3 Concept. Types & Functions of Computer Networks internet and its Applications Web Browsers & Search Engines
- 1.4 Concept of viruses. Malware, spyware Legal & Ethical issues of uses of aforesaid programme

Unit II - MS Office Application

- 2.1 MS Word. Main features & Uses in Physical Education
- 2.2 MS Excel Main Features & its Applications in Physical Education(making of pie chart, bar, statistical calculation.
- 2.3. MS Access' Creating a Database. Creating of Table. Queries, forms & Reports on tables and its Uses Physical Education
- 2.4 MS Power Point: Preparation of Slides With Multimedia effects and MS Publisher,

Newsletter& Brochure.

Unit III- Unit-IV –ICT Integration In Teaching Learning Process

- 3.1 Approaches to integrating ICT in Teaching Learning Process, Project Based Learning(PBL), Co-operative Learning. Collaborative Learning
- 3.2 E-Learning - basic concept and applications. Web Based Learning. VisualClassrooms, searching of common databases like scopus.Pubmed research gate,
- 3.4 ICT and Constructivism. A Pedagogical Dimension
- 3.5 Brief idea about computer programme language and there applications

Unit -IV - Communication &Classroom Interaction

- 4.1 Concept, Element, Process & Types of Communication. Communication Barriers &Facilitators of communications
- 4.2 Communicative skills of English- Listening , Speaking, Reading & Writing
- 4.3 Concept &Importance of ICT Need of ICT In Education
- 4.4 Scope of ICT: Teaching Learning Process, Publication Evaluation, Research and Administration Challenges in integrating ICT in Physical Education

**DEPARTMENT OF PHYSICAL EDUCATION
UNIVERSITY OF KALYANI
DETAILED SYLLABUS
M.P.Ed. SEMESTER-IV**

Course Name: SPORTS PSYCHOLOGY

Course Code: MPCC– 402

Full Marks: 70

UNIT-I: Growth and Development

- Basic Issues - Continuous-discontinuous, Development, One Course of Development or Many, Nature-Nature Controversy, Development theories- Socio cultural, Ecological Systems.
- Physical and Cognitive Development during – Infancy Childhood Adolescence and Adulthood

- Emotional and Social Development during–Infancy , Childhood, Adolescence and Adulthood
- Motor Development –Principles, Sequences Motor Skills of Childhood, Functions or Motor Skills, Hazards in Motor Development

UNIT-II: Memory, Intelligence, Perceptions and Stress

- Memory – Meaning, Memory System, Types Forgetting – causes Decay, Hypothesis
- Intelligence - Meaning, Nature, Types, Theories of Intelligence
- Sensation and Perception - Sensation: Meaning, Stimulus, Threshold Sense Organs, Kinesthetic and Vestibular Sense. Perception: Meaning. Factors, Organizing Principles, Errors, Extra-sensory Perception
- Stress - Meaning. Types, Symptoms, Beneficial Effects of Stress, Sources of Stressors - Internal and External, Stress Management - Exercise, Yoga and Relaxation Techniques, Biofeedback, Cognitive Strategies

UNIT-III: Learning, Motivation, Personality and Psychology of Competition

- Learning - Nature and Characteristics. Motor Learning - Stages, Factors, Process of Motor Skill Acquisition. Transfer of Training - Nature and Theories
- Motivation - Nature, Classification of Motives, Theories of Motivation
- Personality - Meaning, Nature, Theories - Psychoanalytic, Behaviouristic, Humanistic, Factors, Type and Trait
- Psychology of Exercise and Competition - Theories and Models of Exercise Behaviour - Cognitive-behavioural Theories, Process Models of Exercise, Ecological Models. Performance-related Issues: Motivation, Anxiety and Arousal, Concentration and Confidence, Stress and Coping, Burn-out and Over Training, Drugs in Sports

UNIT.IV: Sociological Aspects

- Basic Issues - Social Norms. Status. Leadership and Role. Attitudes, Inter-personal Relations, Social Influence, Social Conflicts, Rules of Games and Sports
- A Group Processes _ Group Cohesion, Social Loafing, Social Conflict, Dimension and determinants of co-operation & conflict III society Brain Storming, Role of games and Sports
- Social Transformation - Migration, Sociological approach to Social Problem. Old age Problem. Crime and its types, Drug use; Delinquency Unemployment. Addiction.

Violence and Terrorism, Role of Games and Sports

- Other Issues Social inequalities, Nature and types, Women Empowerment, pro-social behavior, inter-group competition, Group- Cohesion, Power and Prejudice, Morality , Role of Games and Sports.
- Social Transformation - Self-development, Social Role, Social Perception. Family Types of roles, Chaning family structure, Role of Games and Sports.
- Other Issues- Gender Identities and inequalities, Unity and Diversity, Health Sport as a Vocation, Caste and class, customs and ways of life, Linguistics., Religion, Role of Games and Sports

References

1. Ball, D. W .&Loy,J. W.(1975).Sports and Social order', Contribution to theSociology of Sports. London: AddisonWeseley Publishing Co .. Inc
2. Loy, J. W., Keenyon, G.S.&McPherson, B.d(1978) Sports anti Social SystemNew Delhi; Metropolitan Book Co
3. Argal.R., Elements of Sociology
4. Koenig Sammuel, Sociology; Man and Society
5. Lundberg, G,A Foundation of Sociology
6. Shaw, D., Gorely, T. and Corban, R (2007). Sport and Exercise Psychology.BIOS Scientific publishers: New York.

**DEPARTMENT OF PHYSICAL EDUCATION
UNIVERSITY OF KALYANI
DETAILED SYLLABUS
M.P.Ed. SEMESTER-IV**

DISSERTATION

Course Code: MPCC-403

Students will be encouraged to select 10 problems out of the Library and other resources and review them extensively. They will also be informed to collect data by using related instruments in the sphere of Physiological, Psychological. Anthropometrical and other interdisciplinary areas. Pilot studies will be encouraged on different experimental and survey

studies.

**DEPARTMENT OF PHYSICAL EDUCATION
UNIVERSITY OF KALYANI
DETAILED SYLLABUS
M.P.Ed. SEMESTER-IV**

Course Name: SPORTS PSYCHOLOGY GENDER EDUCATION & VALUE EDUCATION

Course Code: MPEC 401

Full Marks: 70

Unit I. Concept on Gender and Gender Education.

- 1.1 Meaning and Content of Gender Education.
- 1.2 History of women/gender studies.
- 1.3 Gender Perspective: Lesbian, Gay, Bisexual, Transgender, Queer, Intersex and Asexual. (LGBTQIA)
- 1.4 Sex, Difference between Gender and Sex, Patriarchy and Masculinity.

Unit II. Women Empowerment and Women Representation

- 2.1 Women Empowerment.
- 2.2 Gender Discrimination - inequality in Political Representation. Sexuality and Sexual harassment
- 2.3 Women in sports - Myths about Gender and Sports. Gender gap in Physical Education.
- 2.4 Policies to increase women participation in education and sports.

Unit III: Introduction to Value Education

Values: meaning, Definition, Concept of Values, Values Education, Need Importance and Objective, Classification of Values, Basic Values, Values of Religion and Society Value Systems, Concept, meaning and definition, Physical Education and Sports as a value system.

Unit IV: Value Systems

Meaning and Definition, personal and Communal Values, Consistency, Internally consistent, internally inconsistent, Judging Value System, Commitment, Commitment to Values.

REFERENCES:

1. John Archer and Barbara Lloyd(2002),Sex and gender, CambridgeUniversity Press
2. Many Evens (2003), Gender and Social Theory, Open University Press
3. Jsehartmann Tews and Gertrud Pfister (2003),Sport and women, Socialissues in international perceptive, New York: Routledge
4. Leslie Heywood and Shari L.Dwokim (2003), Built Co win: The Female Athletic as cultural Icon, London: University Minnesota Press.

**DEPARTMENT OF PHYSICAL EDUCATION
UNIVERSITY OF KALYANI
DETAILED SYLLABUS
M.P.Ed. SEMESTER-IV**

Course Name: KINANTHROPOMETRY AND KINANTHROPOMETRY RESEARCH IN PHYSICAL EDUCATION

Course code: MPEC 402

Full Marks: 70

Unit - I: Anthropometric Measurements

Anatomical land marks of human body, Girth Measurements, Width and length measurements, Biepicondylar measurements of femur and humerus. Somatotypes, Implication of somatotypes to physical education.

Unit - II: Measurement in Remedial work

Importance, Values of Posture, Tests of Antero-Posterior deviation of spine. Foot measurement - Pain on pressure test, IOWA foot mechanic test, Clark's foot print angle test; Measurement of Body composition – Importance, Types of assessment, Skin fold and Anthropometric methods.

Unit - III: SOMATOTYPING

1. Somatotyping

- a. Sheldon's method of somatotyping
 - i. Critical evaluation of Sheldon's method of somatotyping
- b. Heath – Carter method of somatotyping
 - ii. The rating scales
 - iii. Kinanthropometric measurements
 - iv. First, Second and Third Components
 - v. Somatotyping
 - vi. Somatotype distribution

Unit - IV: BODY PROPORTIONS&BODY COMPOSITION

1. Body Proportions:

- a. Body mass index
- b. The phantom stratagem
- c. The Z – scores
- d. The O – scale system

2. Body Composition:

- a. Different Body composition
- b. Various methods to estimate body composition
- c. Water displacement method
- d. Under water weighing methods
- e. Kinanthropometric determination of the body composition (skinfold thickness)
- f. Application of surface anthropometry (the body profile)
- g. Bioelectrical impedance analysis
- h. Ultrasound assessment of fat

- i. Arm X-ray assessment of fat
- j. Computed tomography (CT) assessment of fat

Semester IV

Practicum Course

MPPC – 401 TRACK AND FIELD/SWIMMING/GYMNASTICS

(Course contents in Gymnastics and Swimming should be chalked out internally considering advance level of students and suitable to their age and gender. Practical skill test any one out of these after completion of syllabus)

Semester IV

Practicum Course

MPPC-402 GAMES SPECIALIZATION

(Course contents in game or sport of specialization should be chalked out internally considering advance level of students and suitable to their age and gender. Practical skill test – ant two)

SEMESTER IV
Practicum Course
MPPC-403 OFFICIATING LESSONS OF TRACK AND
FIELD/GYMNASTICS/SWIMMING

The students of M.P.Ed – IV Semester need to develop proficiency in taking officiating lesson on selected above discipline. In view of this, the students shall be provided with advance mechanism of officiating in selected discipline. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons during the course of the fourth semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these officiating lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

SEMESTER IV
Practicum Course
MPPC-404 OFFICIATING LESSONS OF GAME SPECIALIZATIONS

The students of M.P.Ed – IV Semester need to be develop proficiency in taking officiating lesson on selected game specialization, In view of this, the students shall be provided with advance mechanism of officiating in selected game specialization. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.

Each student teacher is expected to take at least five lesson during the course of the fourth semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these officiating lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

Note: where ever details of any activities are not mentioned, it is expected to elaborate skills by the competent bodies of local Universities/Autonomous College.