

# **GURU KASHI UNIVERSITY**



## **Master of Physical Education**

**Session: 2022-23**

**Department of Physical Education**

## **PROGRAMME LEARNING OUTCOMES**

- Apply the knowledge of programming and Planning in physical education, to understand functions of different systems of the body during exercise.
- Identify the hurdles associated with organization and administration of different events and training schedules
- Design sports training program on basis of scientific principles of training.
- Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- Select and apply appropriate training techniques and use modern equipment's such as smart watches, heart rate monitors, pedometer etc. to enhance performance.
- Analyze the local and global impact of physical activities and sports and games on individuals, organizations and society.
- Understand the impact of the physical education activities in societal and environmental contexts, and work as a demonstrator for the betterment of physical education
- Understanding of professional, ethical, legal, security, social issues and responsibilities in teaching, learning and evaluation

### Programme Structure

<b>Semester-I</b>						
<b>Course Code</b>	<b>Course Title</b>	<b>Course Type</b>				
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
MPD101	Physiology of Exercise	Core	4	0	0	4
MPD102	Research Process in Physical Education & Sports Sciences	Core	4	0	0	4
MPD103	Tests, Measurement and Evaluation in Physical Education	Core	4	0	0	4
<b>Discipline Elective (Any one of the following)</b>						
MPD104	Yogic Sciences	Discipline Elective	3	0	0	3
MPD105	Sports Technology					
MPD106	Health Education and Sports Nutrition					
MPD107	Track and Field –I	Technical Skills	0	0	4	2
MPD108	Yoga	Technical Skills	0	0	4	2
MPD109	Games Specialization-I	Technical Skills	0	0	4	2
MPD110	Teaching Lessons	Technical Skills	0	0	4	2
MPD111	Communication Skills	Ability Enhancement	1	0	0	1
MPD199		MOOC	---	--	---	---
				-		
<b>Total</b>			<b>16</b>	<b>0</b>	<b>16</b>	<b>24</b>

<b>Semester-II</b>						
<b>Course Code</b>	<b>Course Title</b>	<b>Course Type</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
			MPD201	Sports Biomechanics & Kinesiology	Core	4
MPD202	Sports Psychology	Core	4	0	0	4
MPD203	Research Proposal	Research Skill	3	0	2	4
<b>Discipline Elective (Any one of the following)</b>						
MPD204	Sports Journalism and Mass Media	Discipline Elective	3	0	0	3
MPD205	Sports Management and Curriculum Designs in Physical Education					
MPD206	Athletic Care and Rehabilitation					
MPD207	Communication Skills	Ability Enhancement	1	0	0	1
MPD208	Track and Field II	Technical Skills	0	0	4	2
MPD209	Games Specialization-II	Technical Skills	0	0	4	2
MPD210	Gymnastic	Technical Skills	0	0	2	1
MPD211	Officiating Lessons	Technical Skills	0	0	4	2
<b>Value Added courses II (For other discipline students also)</b>						
MPD212	Wellness Training	Value Added Course	2	0	0	2
<b>Total</b>			<b>17</b>	<b>0</b>	<b>16</b>	<b>25</b>

<b>Semester-III</b>						
<b>Course Code</b>	<b>Course Title</b>	<b>Course Type</b>				
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
MPD301	Scientific Principles of Sports Training	Core	4	0	0	4
MPD302	Sports Medicine	Core	4	0	0	4
<b>Discipline Elective (Any one of the following)</b>						
MPD303	Assessment of Health & Fitness of Athlete	Discipline Elective	3	0	0	3
MPD304	Sports Engineering					
MPD305	Physical Fitness and Wellness					
MPD306	Value and Environmental Education	Discipline Elective	3	0	0	3
MPD307	Applied Statistics in Physical Education					
MPD308	Education Technology in Physical Education					
MPD310	Track and Field III	Technical Skills	0	0	4	2
MPD311	Games Specialization-III	Technical Skills	0	0	4	2
MPD312	Aerobics	Technical Skills	0	0	2	1
MPD313	Advanced Coaching Lessons	Technical Skills	0	0	4	2
MPD399		MOOC	----	--	--	--
<b>Open Elective Courses</b>						
MPD309	Lifestyle Management	OE	2	0	0	2
<b>Total</b>			<b>16</b>	<b>0</b>	<b>14</b>	<b>23</b>

<b>Semester-IV</b>						
<b>Course Code</b>	<b>Course Title</b>	<b>Course Type</b>				
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
MPD401	Dissertation	Research Skill	0	0	0	20
MPD402	Leadership Skills	Value Added Course	2	0	0	2
	<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>
<b>Grand Total</b>			<b>49</b>	<b>0</b>	<b>46</b>	<b>92</b>

### **Evaluation Criteria for Theory Courses**

- A. Continuous Assessment: [25 Marks]
  - i. Surprise Test (Two best out of three) - (10 Marks)
  - ii. Term paper (10 Marks)
  - iii. Assignment(s) (10 Marks)
- B. Attendance (5 marks)
- C. Mid Semester Test-1: [30 Marks]
- D. MST-2: [20Marks]
- E. End-Term Exam: [20 Marks]

### **Evaluation Criteria for Practical Courses**

According to NEP continuous evaluation Practical will be 5 times in which each subject will have 20 marks.

**Semester 1<sup>st</sup>****Course Name: Physiology of Exercise****Course Code: MPD101**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Course Outcomes:**

1. Understand the physiological effects of Exercise on different human body systems
2. Appreciate the role of energy systems of human body during sports activities
3. Analyse and implicate the role of nutrition & its relevance in energy production during sports
4. Understand the effect of Climatic conditions and sports performance

**Course Content****UNIT I****16 Hours**

Skeletal Muscles and Exercise:

1. Meaning, Nature, Scope and Importance of Exercise Physiology in Games and Sports.
2. Macro & micro structure of the skeletal muscle.
3. Chemical composition: Sliding filament theory of muscular contraction.
4. Types of muscle fiber. Muscle tone.

**UNIT II****15 Hours**

Cardiovascular System and Exercise:

1. Heart valves and direction of the blood flow: Conduction System of the Heart.
2. Blood supply to the Heart: Cardiac cycle, stroke volume, cardiac output, heart rate.
3. Factors affecting heart rate: Cardiac hypertrophy, effect of exercises and training on the cardiovascular system.

Respiratory System and Exercise:

1. Mechanics of breathing: Respiratory muscles, minute ventilation, ventilation at rest and during exercise.
2. Diffusion of gases: Exchange of gases in the lungs, exchange of gases in the tissues, control of ventilation, ventilation and the anaerobic threshold.
3. Oxygen debt: Lung volumes and capacities, Effect of exercises

and training on the respiratory system.

**UNIT III** **14**  
**Hours**

Metabolism and Energy Transfer:

1. Metabolism: ATP-PC or phosphate system, anaerobic metabolism.
2. Aerobic and anaerobic systems during rest and exercise.
3. Short duration high intensity exercises, High intensity exercise lasting several minutes, long duration exercises.

**UNIT V** **15**  
**Hours**

Climatic conditions and sports performance and ergogenic aids:

1. Variation in temperature and Humidity: Thermoregulation, sports performance in hot climate, Cool Climate, high altitude.
2. Influence of: Amphetamine, Anabolic steroids, Androstenedione, Beta Blocker, Choline, Creatine, Human growth hormone on sports performance.
3. Narcotic, Stimulants: Amphetamines, Caffeine, Ephedrine, Sympathomimetic amines. Stimulants and sports performance.

**Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

**Suggested Readings**

- Kumar, A. and Moses, R.(1995).*Introduction to Exercise Physiology*. PoompugarPathipagam, Madras.
- Beotra, A.(2000).*Drug Education Handbook on Drug Abuse in Sports*. Sports Authority of India, Delhi.
- Clarke, D.H. (1975). *Exercise Physiology*. PrenticeHall Inc., Englewood Cliffs, New Jersey.
- Fox, E.L., and Mathews, D.K. (1981).*The Physiological Basis of Physical Education and Athletics*. Sanders College Publishing, Philadelphia
- Guyton, A.C. (1976).*Suggested Readings of Medical Physiology*. W.B. Sanders co. Philadelphia
- Richard, W. Bowers.(1989). *Sports Physiology*. Brown Publishers, WMC.



**Course Name: Research Process in Physical Education & Sports Sciences****Course Code: MPD102**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Course Outcomes**

1. Understand the need and importance of Research in Physical Education.
2. Acquire knowledge about different types and methods of research.
3. Write research proposals, thesis and dissertations in physical education.
4. Develop measurement tools for undertaking research.

**Course Content****UNIT-I****15 Hours**

Introduction to Research, Qualities and Characteristics of Research & Research Problem:

1. Science and scientific method; Research -definition, the process, importance, nature and types
2. Qualities and Characteristics of good research and good researcher; Need and scope of research in physical education and sports
3. Definition of and developing a research question; Identifying, locating and selecting a research problem
4. Characteristics of a good research problem.

**UNIT-II****16 Hours**

Research Proposal, Literature Review & Literature search strategies:

1. Structure of research
2. Proposal and methodology of preparing research proposal.
3. Purpose and importance of literature review.
4. Basic: Steps in literature search; writing literature review.

Hypothesis, Sampling, Technique and Designs of Sampling:

1. Definition, importance and types of hypothesis.
2. Formulating and stating hypothesis. Characteristics of a good hypothesis; Testing the hypothesis.
3. Defining population and sample and their characteristics;
4. Sampling theory; Importance of sampling; Sampling techniques; Sampling designs; Sample size.

**UNIT-III****14 Hours**

Data Collection Tools, Questionnaire, Interview, Observation:

1. Use and Importance of data collection tools in Research.
2. Types of questionnaire; constructing and administering a questionnaire; questionnaire standardization procedure.
3. Planning interview, preparing question schedule, conducting interview,
4. Summing up.: observational procedure, recording observation i.e. check list, score card and Rating scale.

#### **UNIT IV**

**15 Hours**

Research Proposal and Report:

1. Chapterization of thesis/dissertation, front materials, body of thesis, back materials.
2. Method of writing research proposal, thesis/ dissertation.
3. Method of writing abstract and full paper for Presenting in a conference and to publishing journals.
4. Mechanics of writing research report, foot note and bibliography writing.

#### **Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

#### **Suggested Readings**

- Best, J.W. (1971). *Research in Education*. Prentice Hall, Inc; New Jersey.
- Clarke David. H & Clarke H, Harrison (1984). *Research processes in Physical Education*. Prentice Hall Inc.; New Jersey.
- Craig Williams and Chris Wragg (2006). *Data Analysis and Research for Sport and Exercise Science*. Routledge Press; London.
- Jerry R Thomas & Jack K Nelson (2000). *Research Methods in Physical Activities; Human Kinetics*. Champaign; Illinois.
- Kamlesh, M.L. (1999). *Research Methodology in Physical Education and Sports*. KSK Publishers; New Delhi.
- Moses, A.K. (1995). *Thesis Writing Format*. Poompugar Pathippagam; Chennai.
- Rothstein, A. (1985). *Research Design and Statistics for Physical Education*. Prentice Hall, Inc; Englewood Cliffs.
- Subramanian, R. Thirumalai Kumar S. & Arumugam C. (2010). *Research Methods in Health, Physical Education and Sports*. Friends Publication; New Delhi.
- Moorthy A.M. (2010). *Research Processes in Physical Education*.

FriendsPublication;NewDelhi.

**Course Name: Test, Measurement and Evaluation in Physical Education**  
**Course Code: MPD103**

L	T	P	Cr
4	0	0	4

**Course Outcomes:**

1. Identify the need & importance of test, measurement and evaluation in physical education
2. Administer different motor fitness and physical fitness tests.
3. Perform anthropometric measurements
4. Analyse and interpret the results of tests and measurements used in the field of physical education

**Course Content**

**UNIT I**

**14 Hours**

Introduction to test, measurement and evaluation:

1. Meaning and Definition of test, measurement, evaluation.
2. Principle and Scope of test, measurement and evaluation.
3. Importance of measurement and evaluation in physical education
4. Approach to measurements

**UNIT II**

**16 Hours**

Motor Fitness Tests:

1. Meaning and definition of motor fitness test .
2. Test for motor fitness: Indiana motor fitness test (for elementary and high school boys, girls and college men),
3. Oregon motor fitness Test (separately for boys and girls),
4. JCR test.Motor ability: Barrow motor ability test, Newton motor ability Test.
5. Muscular Fitness: Krausweber minimum muscular fitness test.

Physical Fitness Tests:

1. Physical fitness test: AAHPERD health related fitness battery (revised in 1984).
2. ACSM health related physical fitness test,
3. Roger's physical fitness Index. Cardio vascular test:
4. Harvard step test, 12 minutes run /walk test, Multi-stage fitness test (Beep test).

**UNIT III**

**15 Hours**

Anthropometric and Aerobic-Anaerobic Tests:

1. Physiological testing: Aerobic capacity: The Bruce treadmill test

- protocol, 1.5 mile run test for college age males and females.
2. Anaerobic Capacity: Margariakala men test, Wingate anaerobic test.
  3. Anthropometric measurements: Method of measuring height, standing height, sitting height.
  4. Method of measuring Circumference: Arm, waist, hip, thigh. Method of measuring skin folds: Triceps, sub scapular, supra iliac.

**UNIT IV****15 Hours****MEASUREMENT OF SPORTS:**

1. SKILLS Basketball: Johnson basketball rest, Knox basketball test, Harrison basketball test
2. Badminton: Lockhart Mc. Pherson badminton test, French short & long serve test, Hicks badminton test.
3. Hockey: Henry Fridal field hockey test, Schmithal's dribble.dodge, circular tackle & drive, Schmithal's goal shooting, field & drive test
4. Soccer: Johnson soccer test,
5. Shautele's volleying, passing& recovery test, Shautele's Judgment in passing test
6. Volleyball: Brady's volleying test, French & Cooper's repeated volleying test, French & Cooper's serve test.

**Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

**Suggested Readings**

- Authors Guide, (2013). *ACSM's Health Related Physical Fitness Assessment Manual*. ACSM Publications, USA
- Collins, R.D., & Hodges P.B. (2001) *A Comprehensive Guide to Sports Skills Tests and Measurement*, (2<sup>nd</sup> edition). Scarecrow Press, Lanham.
- Cureton, T.K. (1947). *Physical Fitness Appraisal and Guidance*. The C. Mosby Company, St. Louis.
- Getchell, B. (1979). *Physical Fitness A Way of Life*, 2<sup>nd</sup> Edition. John Wiley and Sons, Inc, New York.
- Jenson, Clayne R. and Cynthia, C. Hirst. (1980). *Measurement in Physical Education and Athletics*. Macmillan Publishing Co. Inc, New York.

**Course Name: Yogic Sciences (Discipline Elective)****Course Code: MPD104**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes:**

1. Understand the various concepts of yogic practice.
2. Demonstrate yoga asanas and explain its benefits.
3. Undertake teaching practice and research in the field of yoga.
4. Understand the basics and benefits of Yoga

**Course Content****UNIT I****09 Hours**

Introduction to Yoga:

1. Meaning, Definition, types, aims and objectives of yoga.
2. Importance of yoga in education & other fields of life.
3. Historical development of yoga from ancient to modern times.
4. Meaning and definition of yoga astanga yoga: Yama, niyama, asana, pranayama, prathyahara, dharana, dhyana, Samadhi.

**UNIT II****10 Hours**

Nadis, Asanas and Pranayam:

1. Loosen in exercise: Techniques and benefits.
2. Asanas & Pranayam:
3. Types, techniques and benefits, suryanamaskar, methods and benefits. Nadis:
4. Meaning, methods and benefits, Asanas: Their meaning, types of Asanas, preparation & technique of different asanas and their effects on the body.

**UNIT III****14 Hours**

Kriyas

1. Shat Kriyas: Meaning, techniques and benefits of neti, dharti, kapalapathi, trataka, nauli, basti.
2. Bandhas: Meaning, techniques and benefits of jalendrabandha, jihvabandha, uddiyanabandha, mulabandha.

Mudras

1. Meaning, techniques and benefits of hasta mudras, asamyuktahastam, samyuktahastam, mana mudra, kaya mudra, banda mudra, adhara mudra.
2. Meditation: Meaning, Techniques and benefits of meditation, Passive and active meditation, saguna meditation and nirguna meditation.

**UNIT IV****12 Hours**

Yoga and Sports Yoga

1. Supplemental exercise: Yoga compensation exercise, yoga regeneration exercise.

2. Power Yoga, role of Yoga in Psychological Preparation of athlete.
3. Mental wellbeing, anxiety, depression concentration, self actualization.
4. Effect of yoga on physiological system: Circulatory, skeletal, digestive, nervous, respiratory, excretory System.

### Transaction Mode

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### Suggested Readings

- Feuerstein, G. (1975). *Suggested Readings of Yoga*. Motilal Bansaridass Publishers (P) Ltd., London.
- Gore (1990). *Anatomy and Physiology of Yogic Practices*. Kanchan Prakashan, Lonavata.
- Purperhart, H. (2004). *The Yoga Adventure for Children*. A Hunter House book, Netherlands.
- Iyengar, B.K.S. (2000). *Light on Yoga*. Harper Collins Publishers, New Delhi.
- Karbelkar, N.V. (1993). *Patanjali Yogasutra Bhashya* (Marathi Edition). Hanuman Vyayam Prasarak Mandal.

**Course Name: Sports Technology (Discipline Elective)**

**Course Code: MPD105**

L	T	P	Cr
3	0	0	3

### Course Outcomes:

1. Identify design of sports equipment and develop skills to optimise and test them.
2. Comprehend the science of sports material and equipment.
3. Recognize modern sports equipment's and gadgets.
4. Modern techniques and skills achieved through latest Equipment's.

### Course Content

#### UNIT I

**10 Hours**

Sports Technology:

1. Meaning, definition, purpose, advantages and applications, general principle and purpose of instrumentation in sports.
2. Work flow of instrumentation and business aspects, technological impacts on sports.
3. A review of methods of teaching employed in physical education

Technology in Physical Education and Sports:

1. Initiating technology, Use of Audio/Video technology, Image analysis,
2. Technological devices used in Physical activity and sports,
3. Techniques of presentation and class management skills

## **UNIT II**

**14 Hours**

Surfaces of Play fields:

1. Modern surfaces for play fields, construction and installation of sports surfaces.
2. Types of materials: Synthetic, wood, polyurethane. Artificial turf. Modern technology in the construction of indoor and outdoor facilities.
3. Technology in manufacture of modern play equipments.
4. Use of computer and software in Match Analysis and Coaching.

## **UNIT III**

**09 Hours**

Modern Equipment:

1. Playing equipments: Balls- Types, materials and advantages.
2. Bat/Stick/Racquets: Types, materials and advantages.
3. Clothing and shoes: Types, materials and advantages.
4. Measuring equipments: Throwing and jumping events.
5. Protective equipments: Types, materials and advantages. Sports equipment with nanotechnology, advantages.

## **UNIT IV**

**12 Hours**

Training Gadgets:

1. Basketball: Ball feeder, mechanism and advantages.
2. Cricket: Bowling machine, mechanism and advantages,
3. Tennis: Serving machine, mechanism and advantages,
4. Volleyball: Serving machine mechanism and advantages.
5. Lighting facilities: Method of erecting flood light and measuring luminous.
6. Video Coverage: Types, size, capacity, place and position of camera in live coverage of sporting events.

### **Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### **Suggested Readings**

- Charles, J. A., Crane, F.A.A. and Furness, J.A.G. (1987). *Selection of Engineering Materials*. Butterworth Heiremann, UK.
- Finn, R.A. and Trojan P.K. (1999). *Engineering Materials and their Applications*. Jaico Publisher, UK.
- Mongilo, J. (2001). *Nano Technology 101*. Greenwood publishing

group, New York.

- Walia, J.S.1999).*Principles and Methods of Education*.PaulPublishers, Jullandhar.
- Kochar, S.K. (1982). *Methods and Techniques of Teaching*.SterlingPublishers Pvt. Ltd,NewDelhi, Jullandhar.
- Kozman, Cassidy and Jackson.(1952).*Methods in Physical Education*.W.B. Saunders Company, Philadelphia and London.

**Course Name: Health Education and Sports Nutrition  
(Discipline Elective)  
Course Code: MPD106**

L	T	P	Cr
3	0	0	3

### Course Outcomes:

1. Identify the components of sports nutrition and their role in achieving sports oriented goals
2. Manage health related issues in athletes like hypertension and stress.
3. Design weight control program for athletes according to their age.
4. Development of Weight management plan

### Course Content

#### UNIT I

**09 Hours**

Health Education:

1. Health Education: Meaning, Scope, Objectives and Spectrum, Principles and Importance of health education, Planning and evaluation in health education programmers.
2. Pollution: Definition, effects and control measures of Air pollution, Water pollution, Noise pollution and Radiation.
3. Natural hazards and their mitigation.

#### UNIT II

**14 Hours**

Health Problems in India:

1. Communicable and non-communicable diseases, obesity, malnutrition, adulteration in food, environmental sanitation, explosive, population.
2. Personal and environmental hygiene for schools, objective of school health service, role of health education in schools.
3. Health services care of skin, nails, eye health service, nutritional service, health appraisal, health record,
4. Healthful school environment, first-aidand emergency care etc.

#### UNIT III

**10 Hours**

Health Hazards, Stress And Injury Management:



1. Hazards of substance abuse: smoking, alcohol & tobacco, Valuable use of leisure time.
2. Emphasis on proper rest, sleep and dreams. Healthy Living and positive lifestyle.
3. Wellness of mind, body and soul. Stress: meaning, causes and management.

**UNIT IV****12 Hours**

Introduction to Sports Nutrition:

1. Meaning and definition of sports nutrition, role of nutrition in sports, basic nutrition guidelines.
2. Nutrients: Ingestion to energy metabolism (Carbohydrate, Protein and Fat).
3. Role of carbohydrates, Fat and protein during exercise.

Nutrition and Weight Management:

1. Concept of BMI (Body mass index), obesity and its hazard, dieting versus exercise for weight control maintaining a Healthy Lifestyle.
2. Weight management program for sporty child, Role of diet and exercise in weight management.
3. Design diet plan and exercise schedule for weight gain and loss.

**Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

**Suggested Readingss**

- Bucher, Charles A. *Administration of Health and Physical Education Programme*.
- Ghosh, B.N. "Treaties of Hygiene and Public Health".
- Hanlon, John J. (2003). *Principles of Public Health Administration*. Turner, C.E.
- Nutrition Encyclopedia, edited by Delores C.S. James, TheGaleGroup, Inc.
- Boyd-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 Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acid*. Thorons.

**Course Name: Track and Field - I****Course Code: MPD107**

L	T	P	Cr
0	0	4	2

**Course Outcomes:**

1. Develop fundamental skills of running, throwing and jumping events.
2. Gain expertise in ground marking in real game situation.
3. Perform game officiating duty independently with perfection.
4. Development and knowledge about Sprints.

**Course Content****UNIT I****22 Hours**

## Running

1. Fundamental skills: Short distance.
2. Starting techniques: Standing start, Crouch start and its variations, Proper use of blocks.
3. Change in body position during running, movements of the arms, stride length and frequency, position of torso while running and at finish.
4. Advanced Skills: Various techniques of sprint start, bullet start, standing start. Active game practice.
5. Finishing Techniques: Run, Through, Forward lunging, Shoulder Shrug.
6. Ground Marking, Rules and Officiating.
7. Interpretation of Rules and Officiating.

**UNIT II****20 Hours**

## Throwing

1. Discus Throw.
2. Basic Skills and techniques of the Throwing events.
3. Grip, Stance, Release, Reserve/ (Follow through action).
4. Ground Marking / Sector Marking.
5. Interpretation of Rules and Officiating.
6. Rules and their interpretations and duties of officials.

**UNIT III****18 Hours**

## Jumping

1. High jump and their types
2. Approach Run.
3. Take off
4. Landing.

**Course Name: Yoga****Course Code: MPD108**

L	T	P	Cr
0	0	4	2

**Course Outcomes:**

1. Develop fundamental skills of self-defence arts, shooting and archery.
2. Gain knowledge of rules and regulations of these sports.
3. Perform officiating duties in real game situation.
4. Analyse and expertizevarious games.

### Course Content

#### UNIT I

**22 Hours**

1. Yoga, Asanasprescribed by Maharshi‘ Patanjali’,
2. Shudhikriyas, jalneti, sutraneti, dugdhaneti, kunjil, nauli, bhastika, shatkriya, pranayams, anulom-vilom, kapalbhathi.

#### UNIT II

**20 Hours**

1. Aerobics: Rhythmic aerobics, dance, low impact aerobics, high impact aerobics,
2. kick boxing moves, march single, basics, side to side alternate turns, double side to side, step touch, grapevine, knee up, leg curl, kick front, toe touch, kick side, side lunge, over the top, back lunge, straddle, kick front, travels l l. Kick side, corner.

#### UNIT III

**18 Hours**

1. Warm up and cool down being successful in exercise and adaptation to aerobic workout.
2. Self Defense Techniques-Martial arts, Taekwondo, Shooting Archery.

**Course Name: Game Specialization-I**

**Course Code: MPD109**

L	T	P	Cr
0	0	4	2

### Course Outcomes

1. Ddemonstrate and assess the techniques of any team game of choice.
2. Understand and follow the rules of these games.
3. Officiate these games with skill.
4. Demonstrate the advanced Techniques of these games.

### Course Content

#### UNIT I

**16 Hours**

Fundamental Skills of any two games from the list -

1. Racket Sports
2. Table Tennis

3. Squash
4. Tennis
5. Badminton.

**UNIT I** **15 Hours**

1. Gymnastic

**UNIT III** **14 Hours**

1. Shooting

**UNIT III** **15 Hours**

1. Swimming

**Course Name: Teaching Lesson**

**Course Code: MPD110**

L	T	P	Cr
0	0	4	2

### Course Outcomes

1. Develop fundamentals of teaching practice
2. Prepare and maintain records in the school
3. Gain skill of assessment work done in the school
4. Development of teaching through teaching practice

### Course Content

**UNIT I** **30 Hours**

1. The students of M.P.Ed–II Semester need to develop proficiency in taking teaching classes of theory of different Sports & Games under school situation. In view of this, the students shall be provided with teaching experience. The duration of the lesson to be conducted by the students shall be in the range of 30 to 40 minutes depending on the class they are going to handle at school and college level.

**UNIT II** **30 Hours**

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

**Course Name: Communication Skills****Course Code: MPD111**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

**Course Outcomes**

1. Demonstrate oral, written, and visual communication skills.
2. Understand and apply knowledge of human communication and language processes.
3. Apply verbal and non-verbal communication techniques in the professional environment.
4. Learn the dynamics of social communication.

**Course Content****Unit-I****02 Hours**

1. Communication: An Introduction, Definition, Nature and Scope of Communication, Importance and Purpose of Communication, Process of Communication, Types of Communication
2. Non-Verbal Communication - Personal Appearance, Gestures, Postures, Facial Expression, Eye Contacts, Body Language(Kinesics), Time language, Silence, Tips for Improving Non-Verbal Communication

**Unit-II****02 Hours**

1. Effective Communication - Essentials of Effective Communication, Communication Techniques, Barriers to Communication
2. Communication Network in an Organization - Personal Communication, Internal Operational Communication, External Operational Communication.

**Unit-III****05 Hours**

1. Reading Skills - Purpose, Process, Methodologies , Skimming and Scanning , Levels of Reading, Reading Comprehension , Academic Reading Tips.
2. Listening Skills - Purpose of Listening, Listening to Conversation (Formal and Informal), Active Listening- an Effective Listening Skill, Benefits of Effective Listening, Barriers to Listening, Listening to Announcements- (railway/ bus stations/ airport /sports announcement/ commentaries etc.), Academic Listening (Listening to Lectures), Listening to Talks and Presentations, Note Taking Tips

**Unit-IV****06 Hours**

1. Oral Communication Skills (Speaking Skills)- Importance of Spoken

English, Status of Spoken English in India, International Phonetic Alphabet(IPA) Symbols, Spelling and Pronunciation, Asking for and giving information, Offering and responding to offers Requesting and responding to requests, Congratulating people on their success Expressing condolences, Asking questions and responding politely, Apologizing and forgiving

2. Effective Writing Skills - Elements of Effective Writing (What is Writing?), The Sentence, Phrases and Clauses, Types of Sentences, Main Forms of Written Communication, Paragraph Writing (Linkage and Cohesion), Letter Writing(formal and informal), Essay writing, Notices.

### Transaction Mode

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### Suggested Readings

- Ian Tuhovsky (2015), *Communication Skills Training*, Create Space Independent Publishing Platform.
- James W.Williams (2020), *Communication Skills Training*, Amazon Digital Services LLC - KDP Print US.
- Debra Fine (2014), *The Fine Art of Small Talk (2005)*, Hachette Books.
- ThichNhatHanh (2014), *The art of communicating (2013)*, HarperCollins Publishers LLC.

## Semester 2nd

**Course Name: Sports Biomechanics and Kinesiology**

**Course Code: MPD201**

L	T	P	Cr
4	0	0	4

### Course Outcomes

1. Comprehend the laws of physics and identify their role in human body locomotion.
2. Grasp the anatomical and biomechanical bases of human movement
3. Recognize the physiological bases of human movement
4. Identify role of Biomechanics in exercise and games

### Course Content

#### UNIT I

**15 Hours**

Introduction:

1. Meaning, nature, role and scope of applied kinesiology and

Sports Biomechanics.

2. Meaning of axis and planes,
3. Dynamics, kinematics, kinetics, Statics.
4. Centre of gravity, Line of gravity,
5. Plane of the body and axis of motion, Vectors and Scalars.

## **UNIT II**

**15 Hours**

Muscle Action:

1. Structural classification of muscles, characteristics of muscle tissue, muscles fiber types,
2. Reciprocal innovation, all or none law,
3. Types of muscles contraction, Role of muscles,
4. Angle of pull, Two-joint muscles, Reflex-action,
5. Muscle tone. Origin, insertion and action of muscles. Pectoral is major and minor, deltoid, biceps, triceps (Anterior and Posterior).

## **UNIT III**

**14 Hours**

Motion and Force:

1. Meaning and definition of motion.
2. Types of motion: Linear motion, angular motion, circular motion, uniform motion.
3. Principals related to the law of Inertia, law of acceleration and law of counter force.
4. Meaning and definition of force, sources of force, force components. Force applied at an angle pressure.
5. Centripetal force centrifugal force. Friction: Buoyancy. Spin.

## **UNIT IV**

**(16 Hours)**

Projectile and Lever:

1. Freely falling bodies: Projectiles, equation of projectiles,
2. Stability, factors influencing equilibrium, guiding principles for stability, static and dynamic stability.
3. Meaning of work, power, energy, kinetic energy and potential energy.
4. Lever age, classes of lever, practical application. Water resistance, Air resistance, aero dynamics.

Movement Analysis:

5. Analysis of movement: Types of analysis, Kinesiological, Biomechanical.
6. Cinematographic .Methods of analysis–qualitative, quantitative, predictive.
7. Principles and Analysis of following movement (Throwing, Striking, Jumping Squat, Dead Lift).

## **Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### **Suggested Readings:**

- Deshpande, S.H. (2002). *ManavKriyaVigyan–Kinesiology* (Hindi Edition). Amravati.
- Hanuman VyayamPrasarakMandal.
- Hoffman, S.J. (2005). *Introduction to Kinesiology*. Human Kinesiology publication In..
- Steven Roy, & Richard Irvin. (1983). *Sports Medicine*. Prentice Hall Inc., New Jersey.
- Thomas. (2001). *Manual of structural Kinesiology*. McGraw Hill, New York.
- Uppal, A. K. & Lawrence, Mamta. (2004). *MP Kinesiology*. Friends Publication, India.
- Uppal, A. (2004). *Kinesiology in Physical Education and Exercise Science*. Friends publications, Delhi.
- Williams, M. (1982). *Biomechanics of Human Motion*. Saunders Co, Philadelphia.

**Course Name: Sports Psychology**

**Course Code: MPD202**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

### **Course Outcomes**

1. Grasp the meaning, nature and scope of sports Psychology.
2. Prepare psychological profiles of sportspersons.
3. Conduct various psychological tests on players.
4. Gain knowledge about various psychological problems faced by sportspersons and their coping techniques.

### **Course Content**

#### **UNIT I**

**15 Hours**

Sports Psychology and Sensory Perceptual Process:

1. Meaning and scope of sport psychology. Importance of sport psychology.
2. Divisions of sport psychology. Sensory Perceptual Process.
3. Meaning, mechanism and stages of sensory perceptual process. Classification of senses and sensory perceptual process.
4. Factors in perception Implication of sensory-perceptual process in exercise and sport



**UNIT II****14 Hours**

Motivation:

1. Meaning and definition, types of motivation: Intrinsic, extrinsic.
2. Achievement motivation: Meaning, measuring of achievement motivation.
3. Anxiety: Meaning and definition, nature, causes, method of measuring anxiety. Competitive anxiety and sports performance.
4. Stress: Meaning and definition, causes. Stress and sports performance.
5. Aggression: Meaning and definition, method of measurement. Aggression and sports performance.
6. Self-concept: Meaning and definition, method of measurement.

**UNIT III****16 Hours**

Goal Setting:

1. Meaning and definition, process of goal setting in physical education and sports.
2. Relaxation: Meaning and definition, types and methods of psychological relaxation.
3. Psychological tests: Types of psychological test-Instrument based tests (Pass along test, Tachistoscope, Reaction timer, Finger dexterity board, Depth perception box, Kinesthesis meter board).
4. Questionnaire: Sports achievement motivation, sports competition anxiety.

Sports Sociology:

5. Meaning and definition, sports and socialization of individual sports as social institution.
6. National integration through sports, fans and spectators:
7. Meaning and definition, advantages and disadvantages on sports performance. Leadership: Meaning, definition, types.
8. Leadership and sports performance.

**UNIT IV****15 Hours**

Group Cohesion:

1. Group: Definition and meaning, group size, group composition, group cohesion, group interaction, group dynamics.
2. Current problems in sports and future directions, sports social crisis management.
3. Women in sports: Sports women in our society, participation pattern among women, gender equalities in sports.
4. Practical: the students in laboratory should conduct at least five experiments related to the topics listed in the UNITS above. (Internal assessment.)

**Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### **Suggested Readings:**

- Authors Guide (2013). *National Library of Educational and Psychological Test (NLEPT) Catalogue of Tests*. National Council of Educational Research and Training Publication, New Delhi.
- Jain. (2002). *Sports Sociology*. Heal SahetyKendrePublishers.
- Jay Coakley. (2001). *Sports in Society– Issues and Controversies in International Education*. Mc-Craw Seventh Ed.
- John D Lauther(2000). *Psychology of Coaching*. PrenticceHall Inc., New Jersey.
- MiroslawVauks&BryantCratty(1999). *Psychology and the Superior Athlete*. The Macmillan, London.

**Course Name: Research Proposal**

**Course Code: MPD203**

L	T	P	Cr
3	0	2	4

### **Course Outcomes**

1. Develop Research question and hypothesis.
2. Carry out literature review.
3. Choose rigorous and practical research methods to address a research problem.
4. Learn writing and verbal communication skills.

### **Course Content**

#### **UNIT I**

**60 Hours**

The students will prepare and submit the research proposal on a topic of their choice.

**Course Name: Sports Journalism and Mass Media  
(Discipline Elective)**

**Course Code: MPD204**

L	T	P	Cr
3	0	0	3

### **Course Outcomes**

1. Identify various types of Media, their functioning and forms of Journalism
2. Identify various types of Media, their functioning and forms of Journalism
3. Develop skills of report writing in context of game/sports event for publications in news paper.
4. Knowledge of national and international sports news agencies.

## **Course Content**

### **UNIT I**

**10 Hours**

Introduction:

1. Meaning and definition of journalism, ethics of journalism, canons of journalism.
2. Sports ethics and sportsmanship, Reporting sports events.
3. Traditional and open source reporting.
4. National and International sports news agencies.

### **UNIT II**

**09 Hours**

Sports Bulletin:

1. Concept of sports bulletin: Journalism and sports education, structure of sports bulletin, compiling a bulletin, types of bulletin.
2. Role of journalism in the field of physical education.
3. Sports as an integral part of physical education, sports organization and sports journalism, general news reporting and sports reporting.

### **UNIT III**

**12 Hours**

Mass Media:

1. Concept, Characteristics and function of Mass Media.
2. Commentary – Running commentary on the radio. Sports expert's comments,
3. Role of advertisement in journalism. Sports photography, equipment, editing, and publishing.

### **UNIT IV**

**14 Hours**

Report Writing on Sports:

1. Brief review of Olympic Games,
2. Asian Games,
3. Common Wealth Games
4. World Cup,
5. National Games and Indian Traditional Games.

6. Preparing report of an annual sports meet for publication in news paper. Organizations of press meet.

Journalism:

7. Sports organization and sports journalism, general news reporting and sports reporting.
8. Methods of editing sports report, evaluation of reported news.
9. Interview with and elite player and coach.

### **Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### **Suggested Readings**

- Ahiya, B.N. (1988). *Theory and Practice of Journalism*. Surjeet Publications, Delhi.
- Ahiya, B.N. & Chobra, S.S.A. (1990). *Concise Course in Reporting*. Surjeet Publication, New Delhi.
- Bhatt S.C. (1993). *Broadcast Journalism Basic Principles*. Haran and Publication, New Delhi.
- Joshi, D. (2010). *Value Education in Global Perspective*. Lotus Press, New Delhi.
- Kannan, K. (2009). *Soft Skills*. Yadava College Publication, Madurai.

**Course Name: Sports Management and Curriculum Design in Physical Education (Discipline Elective)**  
**Course Code: MPD205**

L	T	P	Cr
3	0	0	3

### **Course Outcomes**

1. Understand the concept of sports management.
2. Manage events of physical education and sports
3. Develop skills of financial management and budget making during sports events.
4. Development and knowledge of various sports Events

### **Course Content**

#### **UNIT I**

**09 Hours**

Introduction to Sports Management

1. Management: Meaning, definition, scope, principles, functions of management:
2. Planning, Organizing, Staffing, Directing, Controlling, Coordinating, Evaluating and innovating Skills of management:
3. Personal skills, Human skills, Conceptual skills, Technical skills and Conjoined skills Styles of management
4. Roles of manager: Interpersonal roles, Informational roles, Decisional roles Qualities of a manager

**UNIT II****10 Hours**

## Program Management

1. Tournament organization: Types of tournament-Knock out or Elimination, League or Round Robin, Combination, Consolation, Challenge Tournaments.
2. Intramural Competitions: Meaning and Importance of Intramural, Objectives of Intramural. Importance of programmedevelopment and the role of management.
3. Management guidelines for School, colleges sports programs, management problems in instruction program, community based physical education and sports program.

**UNIT III****12 Hours**

## Equipments and Public Relation

1. Purchase and care of supplies of equipment,
2. Guidelines for selection of equipment and supplies, purchase of equipment's and supplies, equipment room, equipment and supply manager.
3. Guidelines for checking, storing, issuing, care and maintenance of supplies and equipment's.
4. Public relations in sports: Planning the public relation program, principles of public relation, public relations in school and communities, public relation and the media.

**UNIT IV****14 Hours**

## Curriculum

1. Meaning and definition of curriculum.Principles of curriculum construction: Students centered, activity centered, community centered, forward looking principle, principles of integration.
2. Theories of curriculum development, conservative (Preservation of Culture), relevance, flexibility, quality, contextually and plurality.
3. Approaches to Curriculum; Course centered, learner centered and community centered, Curriculum Frame work.
4. Curriculum Sources Factors that affecting curriculum:
5. Sources of curriculum materials, textbooks, journals, dictionaries, encyclopedias, magazines, and internet.
6. Integration of physical education with other sports sciences,

- curriculum research, objectives of Curriculum research, importance of curriculum research.
7. Evaluation of curriculum, methods of evaluation.

### Transaction Mode

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### Suggested Readings

- Aggarwal, J.C.(1990).*Curriculum Reform in India–World overviews*, Doaba World Education Series–3.DoabaHouse, Bookseller and Publisher, Delhi.
- Arora, G.L.(1984).*Reflections on Curriculum*.NCERT, New Delhi.
- Bonnie, L.(1991).*The Management of Sports*. Mosby Publishing Company, Park House, St. Louis.
- Bucher A, Charles. (1993).*Management of Physical Education and Sports*(10<sup>th</sup> Edition).MobyPublishingCompany, St.Louis.
- Carl, E. &Will, Goose. (1982). *Curriculum in Physical Education*. Prentice Hall, London.
- Chakraborty&Samiran. (1998). *Sports Management*. Sports Publication, New Delhi.
- Charles, A, Bucher.&March, L, Krotee. (1993). *Management of Physical Education andSports*.MosbyPublishing Company, St. Louis.

**Course Name: Athletic Care and Rehabilitation  
(Discipline Elective)**

**Course Code: MPD206**

L	T	P	Cr
3	0	0	3

### Course Outcomes

1. Perform examination and evaluation of posture
2. Conduct sports injuries first aid and rehabilitation program
3. Apply techniques of massage therapy.
4. Understand the role of rehabilitation after injury.

### Course Content

#### UNIT I

**09 Hours**

Corrective Physical Education

1. Definition and objectives of corrective physical education.
2. Posture and body mechanics, standards of standing posture, value of good posture, draw backs and causes of bed posture.
3. Posture test: Examination of the spine

## **UNIT II**

**12 Hours**

Postural deformities

1. Normal curve of the spine and its utility.
2. Deviations in posture: Kyphosis, lordosis, flat back, scoliosis, round shoulders, Knock-knee, Bowleg, Flat foot.
3. Causes for deviations and treatment including exercises.

Rehabilitation Exercises

4. Passive, active, assisted, resisted exercise for Rehabilitation.
5. Stretching,
6. PNF techniques and principles.

## **UNIT III**

**14 Hours**

Massage

1. Brief history of massage, massage asana aid for relaxation, points to be considered in giving massage.
2. Physiological, Chemical, Psychological effects of massage, indication contraindication of Massage, Classification of the manipulation used massage.
3. Specific uses in the human body: Stroking manipulation, effleurage pressure manipulation, Petri massage, Kneading. Ironing
4. Skin Rolling: Percussion manipulation, tapotement, hacking, clapping, beating, pounding, slapping, cupping, poking, shaking manipulation, deep massage.

## **UNIT IV**

**10 Hours**

Sports Injuries Care, Treatment and Support

1. Principles pertaining to the prevention of sports injuries, care and treatment of exposed and unexposed injuries in sports,
2. Principles of apply cold and heat,
3. Infrared drays, ultrasonic therapy: Short wave diathermy therapy.
4. Principles and techniques of strapping and bandages.

### **Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### **Suggested Readings**

- Doherty. J.,Meno, Wetb. &Moder, D. (2000).*Track &Field*. Prentice Hall Inc., Englewood Cliffs.
- Lace, M.V. (1951).*Massage and Medical Gymnastics*.J& A Churchill Ltd, London.
- McOoy and Young.(1954).*Tests and Measurement*.AppletonCentury,Naro,New York
- C. L. (1967).*Manual of Massage and, Movement*.FebraandFebraLtd, London.
- Rathbome, J.L. (1965).*Corrective Physical education*. London.
- Stafford and Kelly, (1968).*Preventive and Corrective Physical Education*. W.B. Saunders &Co.,NewYork.

**Course Name: Communication Skills****Course Code: MPD207**

L	T	P	Cr
1	0	0	1

**Course Outcomes**

1. Demonstrate oral, written, and visual communication skills.
2. Understand and apply knowledge of human communication and language processes.
3. Apply verbal and non-verbal communication techniques in the professional environment.
4. Learn the dynamics of social communication.

**Course Content****UNIT-I****02 Hours**

1. Communication: An Introduction, Definition, Nature and Scope of Communication, Importance and Purpose of Communication, Process of Communication, Types of Communication
2. Non-Verbal Communication - Personal Appearance, Gestures, Postures, Facial Expression, Eye Contacts, Body Language(Kinesics), Time language, Silence, Tips for Improving Non-Verbal Communication

**UNIT-II****03 Hours**

1. Effective Communication - Essentials of Effective Communication, Communication Techniques, Barriers to Communication
2. Communication Network in an Organization - Personal Communication, Internal Operational Communication, External Operational Communication.

**UNIT-III****05 Hours**

1. Reading Skills - Purpose, Process, Methodologies , Skimming and Scanning , Levels of Reading, Reading Comprehension , Academic



Reading Tips.

2. Listening Skills - Purpose of Listening, Listening to Conversation (Formal and Informal), Active Listening- an Effective Listening Skill, Benefits of Effective Listening, Barriers to Listening, Listening to Announcements- (railway/ bus stations/ airport /sports announcement/ commentaries etc.), Academic Listening (Listening to Lectures), Listening to Talks and Presentations, Note Taking Tips

#### UNIT-IV

**05 Hours**

1. Oral Communication Skills (Speaking Skills)- Importance of Spoken English, Status of Spoken English in India, International Phonetic Alphabet(IPA) Symbols, Spelling and Pronunciation, Asking for and giving information, Offering and responding to offers Requesting and responding to requests, Congratulating people on their success Expressing condolences, Asking questions and responding politely, Apologizing and forgiving

2. Effective Writing Skills - Elements of Effective Writing (What is Writing?), The Sentence, Phrases and Clauses, Types of Sentences, Main Forms of Written Communication, Paragraph Writing (Linkage and Cohesion), Letter Writing(formal and informal), Essay writing, Notices.

#### Transaction Mode

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

#### Suggested Readings

- Ian Tuhovsky (2015), *Communication Skills Training*, Create Space Independent Publishing Platform.
- James W.Williams (2020), *Communication Skills Training*, Amazon Digital Services LLC - KDP Print US.
- Debra Fine (2014), *The Fine Art of Small Talk (2005)*, Hachette Books.
- ThichNhatHanh (2014), *The art of communicating (2013)*, HarperCollins Publishers LLC.

**Course Name: Track And Field II**

**Course Code: MPD208**

L	T	P	Cr
0	0	4	2

#### Course Outcomes

1. Understand importance of running, jumping and throwing events in Sports & Games.
2. Demonstrate the skills in vvarious techniques of middle distance running, hammer throw, shot-put and pole vault.

3. Interpret the rules and regulations in real game situation.
4. Officiate a match in real game situation.

## Course Content

### UNIT I

**22 Hours**

#### Running

1. Fundamental skills: Middle distance.
2. Starting techniques: Standing start, Crouch start and its variations, Proper use of blocks.
3. Change in body position during running, movements of the arms, stride length and frequency, position of torso while running and at finish.
4. Advanced Skills: Various techniques of sprint start, bullet start, standing start. Active game practice.
5. Finishing Techniques: Run, Through, Forward lunging, Shoulder Shrug.
6. Ground Marking, Rules and Officiating.
7. Interpretation of Rules and Officiating.

### UNIT II

**20 Hours**

#### Throwing

1. Hammer Throw and Shotput.
2. Basic Skills and techniques of the Throwing events.
3. Grip, Stance, Release, Reserve/ (Follow through action).
4. Ground Marking / Sector Marking.
5. Interpretation of Rules and Officiating.
6. Rules and their interpretations and duties of officials.

### UNIT III

**18 Hours**

#### Jumping

1. Pole vault and their types
2. Approach Run.
3. Take off
4. Landing.

**Course Name: Games Specialization II**

**Course Code: MPD209**

L	T	P	Cr
0	0	4	2

## Course Outcomes

1. Gain expertise in officiating signals of the games.
2. Perform tests and measurements related to these games appropriately.
3. Develop skills for demonstrating the basic and advanced techniques of these games

- Achieving knowledge of specific games.

### Course Content

#### UNIT I

**60 Hours**

Fundamental Skills of any two games from the list -

- Kho-Kho, Kabaddi, Baseball, Cricket, Football, Volleyball, Softball, Handball, Basketball, Netball, Hockey, Archery.

**Course Name: Gymnastic**

**Course Code: MPD210**

L	T	P	Cr
0	0	2	1

#### Course Outcomes

- Demonstrate and assess various techniques of gymnastics.
- Gain knowledge about the rules of these games.
- Skilled in officiating these games.
- Skilled in Advanced Techniques of the games.

### Course Content

#### UNIT I

**30 Hours**

- Parallel Bar: Mount from one bar, Straddle walking on parallel bars, Single and double step walk, Perfect swing, Shoulder stand on one bar and roll forward, Roll side, Shoulder stand, Front on back vault to the side(dismount).
- Horizontal /Single Bar: Grip, Swings ,Fundamental Elements, Dismount.
- Uneven Parallel Bar: Grip, Swings, Fundamental Elements, Dismount.

**Course Name: Officiating Lessons**

**Course Code: MPD211**

L	T	P	Cr
0	0	4	2

#### Course Outcomes

- Recognize the officiating signals used in track and field, gymnastics and swimming.
- Develop skills to officiate a game/sports event of track and field, gymnastics and swimming
- Identify the fouls occurring during a game/sports event of track and

- field, gymnastics and swimming
4. Knowledge and skills of Swimming and gymnastics

### Course Content

#### UNIT I

**60 Hours**

Officiating of various track and field events, gymnastics and Swimming under below given headings -

1. Play area dimensions/track and field.
2. Equipment specifications
3. Rules of the game/track and Field and their interpretation.
4. Duties of the concerned officials.

**Course Name: Wellness Training (VAC)**

**Course Code: MPD212**

L	T	P	Cr
2	0	0	2

### Course Outcomes

1. Understand the importance of physical and mental wellness.
2. Acknowledge the importance of wellness for professional development.
3. Design a weight management program.
4. Assess fitness level and prescribe exercises accordingly.

### Course Content

#### UNIT I

**08 Hours**

1. Introduction - Meaning and Definition Wellness
2. Components of Wellness

#### UNIT II

**07 Hours**

1. Need and Importance of Wellness
2. Factors affecting Wellness.

#### UNIT III

**08 Hours**

1. Fitness, Types and Components of Fitness,
2. Exercise Prescription for Anaerobic, Aerobic Capacities.

#### UNIT IV

**07 Hours**

1. Behavioural change and wellness.
2. Recreational Games.

### Transaction Mode

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### Suggested Readings

- Michelle Sutton-Kerchner (2019)  
<http://fitnessandwellnessnews.com/healthystress-management/>
- Muktibodhananda Swami (1998) *Hatha Yoga Pradipika*, The Yoga Publication: Bihar.
- Nanette E. Tummers (2013) *Stress Management: A Wellness Approach*, Human Kinetics
- Rujuta Diwekar (2009) *Don't Lose Your Mind, Lose Your Weight*, Random House India: Mumbai.

### Semester 3<sup>rd</sup>

**Course Name: Scientific Principles of Sports Training**

**Course Code: MPD301**

L	T	P	Cr
4	0	0	4

### Course Outcomes

1. Undertake training and coaching assignments in the field of physical education
2. Recognize the areas of recent development in sports and inculcate them in the training process
3. Develop skills to plan training programs as per the need of an athlete
4. Development of physical training techniques.

### Course Content

#### UNIT I

**14 Hours**

Introduction:

1. Sports training: Definition, aim, characteristics, principles of sports training.
2. Over load: Definition causes of over load, symptoms of over load.
3. Remedial measures: Super compensation, altitude training, cross training.

#### UNIT II

**15 Hours**

Methods of Training:

1. Methods of Training: Importance, Principles,

2. Types of training - Weight training, Circuit training, Interval training, Fartlek training, Cross-Country and Plyometric training.
3. Training means and methods: Types, Classification of Physical Exercise, Basic Methods of Conditioning .
4. Muscular Adaptations to Aerobic and Anaerobic training: Fiber Composition, Oxygen Delivery, Energy Production.

**UNIT III****15 Hours**

Flexibility:

1. Flexibility: Methods to improve the flexibility stretch and hold method, ballistic method.
2. Specials type Training: Plyometric training. Training for coordinative abilities, methods to improve coordinative abilities.
3. Sensory method, variation in movement execution method,
4. Variation in external condition method, combination of movement method, types of stretching exercises.

**UNIT IV****16****Hours**

Training Plan:

1. Training Plan: Macro cycle, meso cycle, micro cycle.
2. Short term plan and long term plan.
3. Periodization: Meaning, single, double and multiple periodization, preparatory period, competition period and transition period.

Doping:

4. Definition of doping, side effects of drugs, dietary supplements,
5. IOC list of doping classes and methods. Blood doping:
6. The use of erythropoietin in blood boosting, blood doping control, the testing program, problems in drug detection.
7. Blood testing in doping control problems with the supply of medicines Course to IOC regulations.
8. Over, the, counter drugs (OTC), prescription only medicines (POMs), Controlled drugs (CDs).Reporting test results, education.

**Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

**Suggested Readings**

- Beotra, Alka. (2000). *Drug Education Handbook on Drug Abuse in Sports*. Sports Authority of India, Delhi.
- Bunn, J.N. (1998). *Scientific Principles of Coaching*. Prentice Hall Inc.,

Engle Wood Cliffs, New Jersey.

- Cart,E. Klafs& Daniel, D. Arnheim(1999).*Modern Principles of Athletic Training*. C.V.MosphyCompany, St .Louis.
- Daniel,D.Arnheim(1991). *Principles of Athletic Traning*.Mosby Year Book, St.Louis.
- David, R. Mottram (1996).*Drugsin Sport*. School of Pharmacy, John Moore University, Liverpool.
- Gary,T.Moran(1997). *Cross Training for Sports*. HumanKinetics, Canada.

**Course Name: Sports Medicine**

**Course Code: MPD302**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

### **Course Outcomes**

1. Provide first aid treatment and rehabilitation programs for sports injuries.
2. Gain knowledge about sports injuries affecting different parts of body.
3. Develop skills to use the sports techniques flawlessly to minimize injuries.
4. Development and knowledge of sports Medicine.

### **Course Content**

#### **UNIT I**

**16 Hours**

Introduction

1. Meaning, definition and importance of sports medicine,
2. Definition and principles of the rapetic exercises coordination exercise.
3. Balance training exercise, strengthening exercise, mobilization exercise, gait training, gym ball exercise.
4. Injuries: acute, sub-acute, chronic, advantages and disadvantages of PRICE, PRINCE therapy, aquatic therapy.

Basic Rehabilitation:

1. Basic Rehabilitation, Strapping/tapping, definition, principles precautions contraindications.
2. Proprioceptive neuromuscular muscular facilitation: Definition hold, relax, repeated contractions.
3. Show reversal technique exercises. Isotonic, Isokinetic, Isometric. Stretching:
4. Definition, types of stretching, advantages, dangers of stretching, manual muscle grading.

#### **UNIT II**

**14 Hours**

AGE AND GENDER CONSIDERATION IN SPORTS

1. Biological, chronological age and age determination.

2. Suitability of sports at various stages of growth. Special problems women and sports performance .
3. Exercise benefits at various stages of life.
4. Physical, physiological, bio-chemical and bio-mechanical difference between men & women.

**UNIT III****15 Hours**

## Upper Extremity Injuries and Exercise

1. Upper limb and thorax injuries: Shoulder- sprain, strain, dislocation, and strapping. Elbow- sprain, strain, strapping.
2. Wrist and Fingers- sprain strain, strapping. Thorax, Rib fracture. Breathing exercises, relaxation techniques, freeh and exercise, stretching and strengthening exercise for shoulder, elbow, wrist and hand.
3. Supporting and aiding techniques and equipment for upper limb and thorax injuries.

**UNIT IV****15 Hours**

## Lower Extremity Injuries and Exercise

1. Lower limb and abdomen injuries: Hip- adductor strain, dislocation, strapping. Knee- sprain, strain, strain, strapping.
2. Ankle- sprain, train, strapping. Abdomen- Abdominal wall, contusion, abdominal muscle strain. Free exercises–Stretching and strengthening. Exercise for Hip, knee, ankle and Foot.
3. Supporting and aiding techniques and equipment for lower limb and abdomen injures. Practical lab:
4. Practical and visit to physiotherapy centre to observe treatment procedure of sports injuries; data collection of sports injury incidences, visit to TV centre etc. should be planned internally.

**Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

**Suggested Readings**

- Christopher, M. Norris. (1993). *Sports Injures Diagnosis and Management for Physiotherapists*. Thomson LithoLtd., East Kilbride.
- James, A. Gould & George J. Davies. (1985). *Physical Therapy*. C.V. Mosby Company, Toronto.
- Morris, B. Million (1984). *Sports Injuries and Athletic Problem*. Surjeet Publication, New Delhi.
- Pande. (1998). *Sports Medicine*. KhelShityaKendra, New Delhi.
- The Encyclopedia of Sports Medicine. (1998).



**Course Name: Assessment of Health & Fitness of Athlete  
( Discipline Elective )  
Course Code: MPD303**

L	T	P	Cr
3	0	0	3

### Course Outcomes

1. Understand the relation of body composition and sports performance.
2. Evaluate and regulate the food and fuel intake of athletes.
3. Demonstrate functional tests in athletes.
4. Identify nutritional deficiencies in sportsperson.

### Course Content

#### UNIT I

**13 Hours**

##### Assessment of Physique

1. Kinanthropometry: Definition; Introduction; Body size and proportion; Somatotyping; Circumferences; Skinfold measurement sites and determining body composition; Applications.
2. Body Composition and Performance: Factors that affect Body Composition; Assessment and Interpretation of Anthropometric and body composition data; Ideal Body Composition for Different Sports (Fat Mass and Fat Free Mass).
3. Body Composition Assessment Techniques: Direct, Indirect and Doubly indirect (Under Water Weighing, DEXA, Whole Body Conductivity, Skin folds, Bioelectrical Impedance, Total Body Potassium, Near Infrared Interactance).

#### UNIT II

**14 Hours**

##### Dietary Assessment of Athletes

1. Different methods of dietary assessment (food and fluid intake): Description; Advantages and Disadvantages; Applications; Assessing food and fluid intake while traveling.
2. Special issues with dietary assessment in sports: Diversity in intake; Training periodisation and food intake; Misreporting; Season and region specific dietary practices.
3. Estimation of dietary intakes: Food data tables and software use; Evaluation of Nutrient Adequacy of Athletes' dietary intake; Methods for assessing food and fuel intake among athletes; Types of dietary assessment tools (Validity and reliability among athletes); Special concerns in assessing food intake among athletes; Translating the dietary intake data into analysis and determining nutritional information.

#### UNIT III

**10 Hours**

## Assessment of Physical fitness

1. Functional tests: Cardiorespiratory and muscular assessment; Type of measurement and protocol for evaluation and interpretation of performance; Aerobic Power or VO<sub>2</sub>max; Anaerobic Threshold; Economy of Movement.
2. Fitness assessment: Types of exercise, Components of physical fitness and its evaluation in health and performance.
3. Activity Recording: Self-reporting of activities vs. Direct monitoring of activities.

**UNIT IV****08 Hours**

## Biochemical and clinical assessment in sports

1. Biochemical estimation: Assessment of Lipids, Protein, Vitamin and Mineral Status.
2. Clinical Assessment: Signs and symptoms of various nutritional deficiencies.
3. Assessment of Hydration: Estimation of sweat loss and sweat rate; urine volume and indicators of dehydration (Water, Urine and Thirst).

**Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

**Suggested Readings**

- Driskell, J. A., & Wolinsky, I. (Eds.). (2016). *Nutritional assessment of athletes*. CRC press.
- Eston, R., & Reilly, T. (Eds.). (2013). *Kinanthropometry and exercise physiology laboratory manual: tests, procedures and data: volume two: physiology*. Routledge.
- ACSM's Health-Related Physical Fitness Assessment Manual.
- H Aile, L., Agher Jr, G. A., Ael, M., & J Robertson, R. (2016). *Perceived exertion laboratory manual*. Springer New York.
- Heyward, V. H., & Gibson, A. (2014). *Advanced fitness assessment and exercise prescription 7th edition*. Human kinetics.

**Course Name: Sports Engineering (Discipline Elective )****Course Code: MPD304**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes**

1. Understand the mechanics of engineering materials.
2. Identify sports dynamics and utilize them to enhance performance
3. Develop skills for designing and maintenance of sports infrastructure.
4. Use of technology in the field of physical education

## Course Content

### UNIT I

**14 Hours**

Introduction to sports engineering and Technology:

1. Meaning of sports engineering, human motion
2. Detection and recording, human performance, assessment,
3. Equipment and facility designing and sports related instrumentation and measurement.

Mechanics of engineering materials:

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

### UNIT II

**08 Hours**

Sports Dynamics:

1. Introduction to dynamics, kinematics to particles, rectilinear and plane curvilinear motion coordinate system.
2. Kinetics of particles, Newton's laws of motion, work, energy,
3. Impulse and momentum.

### UNIT III

**13 Hours**

Infrastructural Development:

1. Sports infrastructure, gymnasium, pavilion, swimming pool, indoor stadium, out-door stadium, play park, academic block, administrative block, research block, library, sports hostels, etc.
2. Requirements: Air ventilation, daylight, lighting arrangement, galleries, storerooms, office, toilet blocks (M/F), drinking water, sewage and waste water disposal system, changing Rooms (M/F).
3. Sound system (echo-free), internal arrangement according need and nature of activity to be performed, corridors and Gates for free movement of people.

**UNIT IV****10 Hours**

Maintenance and Facility life cycle costing:

1. Basics of theoretical analysis of cost, total life cost concepts, maintenance costs, energy cost, capital cost and taxation. Emergency provisions of lighting, fire and exits,
2. Eco-friendly outer surrounding. Maintenance staff, financial consideration.
3. Building process: Design phase (including brief documentation), construction phase functional (occupational) life, re-evaluation,
4. Refurnish, demolish. Maintenance policy, preventive maintenance, corrective maintenance, record and register for maintenance.

**Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

**Suggested Readings**

- Franz, K.F. et. al., (2013). *Rout ledge Handbook of Sports Technology and Engineering* Rout ledge.
- Steve Hake. (1996). *The Engineering of Sport*. CRC Press.
- Youlin Hong. (2013) *Rout ledge Handbook of Ergonomics in Sport and Exercise* Routledge.
- Jenkins M. (2003). *Materials in Sports Equipment, Volume I*. Elsevier.

**Course Name: Physical Fitness and Wellness (Discipline Elective )**

**Course Code: MPD305**

L	T	P	Cr
3	0	0	3

**Course Outcomes**

1. Apply fitness and wellness management techniques.
2. Pursue and orient students towards achieving a healthy and positive life style.
3. Develop competency for profile development, exercise guidelines adherence.
4. Physiological effect of human movement.

**Course Content****UNIT I****14 Hours**

## Introduction:

1. Meaning and definition" of physical fitness, physical fitness concepts and techniques. Principles of physical fitness, physiological principles involved in human movement.
2. Components of Physical Fitness. Leisure time physical activity and identify opportunities in the community to participate in this activity.
3. Current trends in fitness and conditioning, components of total health fitness and the relationship between physical activity and lifelong wellness.

## Nutrition:

1. Nutrients: Nutrition labeling in formation, food choices, food guide pyramid, Influences on food choices social, economic, cultural, food sources.
2. Comparison of food values. Weight management, proper practices to maintain, lose and gain.
3. Eating disorders, proper hydration, and the effects of performance enhancement drugs.

**UNIT II****10 Hours**

## Aerobic Exercise:

1. Cardio respiratory endurance training: Proper movement forms, i.e., correct stride, arm movements.
2. Body alignment: Proper warm-up, cool down and stretching, monitoring heart rates during activity.
3. Assessment of cardio respiratory fitness and set goals to maintain or improve fitness levels.
4. Cardio respiratory activities including i.e. power walking, pacer test, interval training, incline running, distance running, aerobics and circuits.

**UNIT III****12 Hours**

## Anaerobic Exercise:

1. Resistance training for muscular strength and endurance, principles of resistance training.
2. Safety techniques (spotting, proper body alignment, lifting techniques, spatial, awareness. And proper breathing techniques).
3. Weight training principles and concepts, basic resistance exercises (including freehand exercise, free weight exercise, weight machines, exercise bands and tubing.
4. Medicine balls, fit balls) advanced techniques of weight training.

**UNIT-IV****09 Hours**

## Flexibility Exercise:

1. Flexibility training, relaxation techniques and core training.
2. Safety techniques (stretching protocol; breathing and relaxation techniques) types of flexibility exercises (i.e. dynamic, static),

3. Develop basic competency in relaxation and breathing techniques. Pilates, Yoga.

### Transaction Mode

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### Suggested Readings

- David K. Miller & T. Earl Allen (1989). *Fitness, A life time commitment*. Surjeet Publication, Delhi.
- Dificore Judy (1998). *The complete guide to the postnatal fitness*, A & C Black Publishers Ltd., London.
- Dr. A.K. Uppal (1990). *Physical Fitness*. Friends Publications, India,
- Elizabeth & Keday (1986). *Sports fitness for women*. B.T. Bats fords Ltd, London.
- Emily R. Foster, Karyn Hartiger & Katherine A. Smith (2002). *Fitness Fun*. Human Kinetics Publishers.
- Lawrence, Debbie (1999). *Exercise to Music*. A & C Black Publishers Ltd., London.

**Course Name: Value and Environmental Education  
(Discipline Elective )**

**Course Code: MPD306**

L	T	P	Cr
3	0	0	3

### Course Outcomes

1. Appreciate the need and importance of moral values in life
2. Comprehend the various concepts of environment education.
3. Identify various health problems prevalent in rural and urban areas.
4. Knowledge of Environmental degradation.

### Course Content

#### UNIT I

**14 Hours**

Introduction to Value Education:

1. Values: Meaning, definition, concepts of values.
2. Value education: Need, importance and objectives.
3. Moral values: Need and theories of values.
4. Classification of values: Basic values of religion, classification of values.

Value Systems:

1. Meaning and definition, personal and communal values, consistency, internally consistent, internally inconsistent.
2. Meaning of Environmental Education for Sustainable Development (EESD).
3. Judging value system, commitment, commitment to values.

## **UNIT II**

**12 Hours**

Environmental Education:

1. Definition, scope, need and importance of environmental studies.
2. Concept of environmental education, Objective of environmental Education.
3. Celebration of various days in relation with environment, plastic recycling & prohibition of plastic bag/cover,
4. Role of school in environmental conservation and sustainable development. Pollution free eco-system.

## **UNIT III**

**10 Hours**

Rural Sanitation and Urban Health:

1. Rural health problems, causes of rural health problems, points to be kept in mind for improvement of rural sanitation,
2. Urban health problems, process of urban health, services of urban area. Suggested education activity, services on urban slum area.
3. Sanitation at fairs & festivals, mass education.

## **UNIT IV**

**09 Hours**

Natural Resources and related environmental issues:

1. Water resources, food resources and land resources, definition, effects and control
2. Measures of- Air pollution, water pollution, soil pollution, noise pollution, thermal pollution
3. Management of environment and Govt. policies, role of pollution control board.

### **Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### **Suggested Readings**

- Miller T.G. Jr. (1971). *Environmental Science*. Wadsworth Publishing Co., U.S.A.

- Rao, M.N.&Datta, A.K. (1987). *Waste Water Treatment*.Oxford & IBH Publication Co. Pvt. Ltd., India.
- Heywood, V.H. and Watson V.M., (1995) *Global biodiversity Assessment*.Cambridge University Press,U.K.
- Jadhav, H. and Bhosale, V.M.(1995).*Environmental Protection and Laws*.Himalaya Pub. House, Delhi.
- McKinney, M.L. and Schoel, R.M. (1996). *Environmental Science System and Solution*.Web enhanced Ed.

**Course Name: Applied Statistics in Physical Education  
(Discipline Elective )  
Course Code: MPD307**

L	T	P	Cr
3	0	0	3

### Course Outcomes

1. Understand basic approaches to research.
2. Perform statistical analysis of a basic research work.
3. Apply various statistical tests to research work in the field of physical education.
4. Analyse the Statistical data in the field of physical education and sports.

### Course Content

#### UNIT I

**12 Hours**

Introduction:

1. Meaning, Definition, Need and Importance of Statistics in Physical Education.
2. Types of Statistical Process: descriptive, comparative, inferential, predictive.
3. Attribute and variable. Frequency distribution, Raw scores, Single scores.
4. Types of data, Population and sample. Parameters and statistics

#### UNIT II

**14 Hours**

Data Classification, Tabulation and Measures of Central Tendency:

1. Meaning, uses and construction of frequency table.
2. Meaning, purpose, calculation and advantages of Measures of central tendency–
3. Mean, median and mode.

Measures of Dispersions and Scales:

1. Meaning, purpose, calculation and advances of Range,
2. Quartile deviation, Mean deviation, Standard deviation,
3. Probable error, meaning, purpose, calculation and advantages of



scoring scales- Sigma scale, Z scale, Hull scale.

### UNIT III

**09 Hours**

Probability Distributions and Graphs:

1. Normal curve: Meaning of probability, principles of normal curve, and properties of normal curve.
2. Divergence form normality: Skewness and Kurtosis.
3. Graphical representation in Statistics: Line diagram, bar diagram, Histogram, Frequency Polygon,

### UNIT IV

**10 Hours**

Inferential and Comparative Statistics:

1. Tests of significance: Independent “t” test, dependent “t” test, chi square test,
2. level of confidence and interpretation of data.
3. Correlation: Meaning of correlation, co-efficient of correlation, calculation of co-efficient of correlation by the product moment method and rank difference method.
4. Concept of ANOVA and ANCOVA.

### Transaction Mode

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

### Suggested Readings

- Best, J.W. (1971). *Research in Education*, Prentice Hall, Inc, New Jersey.
- Clark, D.H. (1999). *Research Problem in Physical Education*, 11<sup>th</sup> edition. Prentice Hall, Inc., Eagle wood Cliffs.
- Jerry, R Thomas. & Jack, K Nelson. (2000). *Research Methods in Physical Activities*. Human Kinetics, Illonosis.
- Kamlesh, M.L. (1999). *Research Methodology in Physical Education and Sports*. KSK Publishers, New Delhi.
- Rothstain, A. (1985). *Research Design and Statistics for Physical Education*. Prentice Hall, Inc., Engle wood Cliffs.
- Sivarama Krishnan, S. (2006). *Statistics for Physical Education*. Friends Publication, Delhi.
- Thirumalaisamy, (1998). *Statistics in Physical Education*. Senthilkumar Publications, Karaikudi.

**Course Name: Education Technology in Physical**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
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**Education (Discipline Elective )****Course Code: MPD308**

<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes**

1. Gain expertise in application of pioneering technologies to enhance teaching in physical education.
2. Inculcate use of audio visual media for the purpose of teaching and training in physical education.
3. Identify recent innovations in the area of education technology related to physical education.
4. Use of technology in the field of physical education

**Course Content****UNIT-I****07 Hours**

Education Technology:

1. Educational technology: Need, Nature and Scope, Effective teaching and Principles of teaching
2. Teacher's responsibilities, Phases and levels of teaching,
3. A review of methods of teaching employed in physical education

**UNIT: II****14 Hours**

Systems Approach to Physical Education and Communication:

1. Systems approach to education and its Components:
2. Goal setting, task analysis, content analysis. Context analysis and evaluation strategies:
3. Instructional strategies and media for Instruction. Effectiveness of communication in instructional system
4. Communication modes, barriers and process of communication.

Instructional Design:

1. Instructional design: Concept, views. Process and stages of development of instructional design.
2. Overview of models of instructional design:
3. Instructional design for competency based teaching, models for development of self learning material.

**UNIT: III****12 Hours**

Audio Visual Media in Physical Education:

1. Audio-visual media-meaning, importance and various forms Audio/Radio:
2. Broadcast and audio recordings, strengths and limitations, criteria for selection of instructional UNITS, script writing, pre-production, post-production process and practices, audio conferencing and interactive

- radio conference.
3. Video/Educational television: Telecast and video recordings strengths and limitations, video conferencing, SITE experiment, country wide classroom project and satellite based instructions.
  4. Use of animation films for the development of children's imagination.

**UNIT: IV****12 Hours**

New Horizons of Educational Technology:

1. Recent innovations in the area of ET interactive video:
2. Hypertext, video-texts, optical fiber technology, laser disk, computer conferencing, etc.
3. Procedure and organization of Tele conferencing/interactive video-experiences of institutions, schools and universities.
4. Recent experiments in the third world countries and pointers for, India with Suggested Readings to Physical education.
5. Recent trends of research in educational technology and its future with Suggested Readings to education.

**Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

**Suggested Readings**

- AmitaBhardwaj. (2003). *New Media of Educational Planning*. Sarupof Sons, New Delhi.
- Bhatia and Bhatia. (1959). *ThePrinciples and Methods of Teaching*.DoabaHouse,New Delhi.
- Essentials of Educational Technology, MadanLal, Anmol Publications
- Sampath, A. Pannirselvam and S. Santhanam. (1981).*Introduction to Educational Technology*.Sterling Publishers Pvt. Ltd., New Delhi.
- Kochar, S.K. (1982). *Methods and Techniques of Teaching.*, Sterling Publishers Pvt. Ltd.,New Delhi, Jalandhar.
- Kozman, Cassidy and k Jackson. (1952). *Methods in Physical Education*. W.B. Saunders Company, Philadelphia and London.

**Course Name: Lifestyle Management (Open Elective )**  
**Course Code: MPD309**

L	T	P	Cr
2	0	0	2

**Course Outcome**

1. To know about role foods and Nutrition in sports performance

2. To create the awareness regarding research in the field of physical fitness and wellness.
3. To know about various techniques of Aerobic and anaerobic exercise and its benefits
4. To Know about the flexibility exercise and its role on sports performance

## **Course Content**

### **UNIT-I**

**05 Hours**

1. Life style and Health fitness relationship, Meaning of active life style, Physical Inactivity and associated health risks Diabetes, Hypertension, Atherosclerosis, Arthritis

### **UNIT-II**

**10 Hours**

1. Nutrition: base for human performance-Carbohydrates, Fats and Proteins. Recommended intake for Normal persons and exercising individuals. Vitamins, Minerals and Water. Osteoporosis and Calcium, Minerals and performance. Optimal nutrition for exercise, Energy value of different important foods, Food Pyramid, fluid replacement before, during and after exercise for temperature regulation and injury prevention, carbohydrates and electrolytes during exercise.

### **UNIT-III**

**09 Hours**

1. Stress-meaning and types of stress, Physical and mental stress-Harmful effects of overtraining and excessive exercise on health, - mental stress and painful effects of mental stress on health. Anxiety, Depression, insomnia, Compulsive obsessive behaviors, Stress relief through exercise and stress management protocols.

### **UNIT-IV**

**06 Hours**

1. Health behavior, Self efficacy and health behavior, Behavioral modification for wellness, Social support and health of an individual, Life style and other related aspects of activity during childhood . Facts on childhood obesity and activity.

## **Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

## **Suggested Readings**

- Lifestyle management in Health and Social care, Merinda Thew and Jim McKenna, BlackwellPublishing. United Kingdom.
- Predicting Health behavior, Mark Connor and Paul Norman, Open University Press, Buckingham, UK.

- Health Behavior and health education: Theory, research and Practice, Karen Glanz, Barbara Rimer, Viswanath, John Wiley and Sons, USA. (Free pdf book)
- Human Body Composition, Steven B Heymstead, Timothy Lohan, Zimian Wang, Scott B Going, Human Kinetics, USA.
- Science of Flexibility, Michael J Alter, Human Kinetics, USA.
- Applied Body Composition Assessment, Vivian H Heyward, Dale R Wagner, Human Kinetics, USA.
- Coping with life stress-the Indian experience, Meena Hariharan, Amazon Books.
- Stress Management- a Wellness approach, Nanette E Tummers, Human Kinetics, USA.
- Wellness Workbook: How to achieve enduring health and vitality, John W Travis and Regina S R

**Course Name: Track and Field - III**

**Course Code: MPD310**

L	T	P	Cr
0	0	4	2

### Course Outcome

1. Develop fundamental skills of running, throwing and jumping events.
2. Gain expertise in ground marking in real game situation.
3. Perform game officiating duty independently with perfection.
4. Development and knowledge about Sprints.

### Course Content

#### UNIT I

**22 Hours**

##### Running

1. Fundamental skills: Long distance.
2. Starting techniques: Standing start, Crouch start and its variations, Proper use of blocks.
3. Change in body position during running, movements of the arms, stride length and frequency, position of torso while running and at finish.
4. Advanced Skills: Various techniques of sprint start, bullet start, standing start. Active game practice.
5. Finishing Techniques: Run, Through, Forward lunging, Shoulder Shrug.
6. Ground Marking, Rules and Officiating.
7. Interpretation of Rules and Officiating.

#### UNIT II

**20Hours**

##### Throwing

1. Javelin Throw.
2. Basic Skills and techniques of the Throwing events.

3. Grip, Stance, Release, Reserve/ (Follow through action).
4. Ground Marking / Sector Marking.
5. Interpretation of Rules and Officiating.
6. Rules and their interpretations and duties of officials.

**UNIT III****18 Hours**

## Jumping

1. Long Jump and Triple Jump
2. Approach Run.
3. Take off
4. Landing.

**Course Name: Game Specialization-III****Course Code: MPD311**

L	T	P	Cr
0	0	4	2

**Course Outcomes**

1. Demonstrate and assess the techniques of any team game of choice.
2. Understand and follow the rules of these games.
3. Officiate these games with skill.
4. Demonstrate the advanced Techniques of these games.

**Course Content****UNIT I****60 Hours**

Fundamental Skills of any two combative games from the list -

1. Karate,
2. Judo,
3. Fencing,
4. Boxing,
5. Taekwondo,
6. Wrestling,
7. Wushu.

**Course Name: Aerobics****Course Code: MPD312**

L	T	P	Cr
0	0	2	1

**Course Outcomes**

1. Demonstrate basic skills associated with aerobics.
2. Demonstrate the ability to perform aerobic movements in various combination and forms.

3. Teach aerobics as a group exercise.
4. Acknowledge the importance of warm and cool down.

### **Course Content**

#### **UNIT I**

**30 Hours**

1. Rhythmic aerobics, dance, low impact aerobics, high impact aerobics, kick boxing moves, march single, basics, side to side alternate turns, double side to side, step touch, grapevine, knee up, leg curl, kick front, toe touch, kick side, side lunge, over the top, back lunge, straddle, kick front, travels 11. Kick side, corner.

**Course Name: Advanced Coaching Lessons**

**Course Code: MPD313**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>

### **Course Outcomes**

1. Undertake training and coaching assignment
2. Prepare and maintain records in the school.
3. Perform assessment of the work done in school
4. Teach the specific game and can rectify mistakes.

### **Course Content**

#### **UNIT I**

**60 Hours**

1. The students of M.P.Ed–III Semester need to develop proficiency in taking teaching classes in indigenous activities and sport under school situation. In view of this, the students shall be provided with teaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class they are going to handle at school and college level. Each student teacher is expected to take at least five lessons during the course of the second semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these lessons, the duration should slowly increase and all the part soft he lesson covered progressively.

**Semester 4<sup>th</sup>**

**Course Name: Dissertation****Course Code: MPD401**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>

**Course Outcomes**

1. Plan an independent research work related to physical education.
2. Learn about various methods of data collection
3. Identify the problems faced while undertaking a research work
4. Develop skills to interpret and critically analyse the results and formulate conclusions accordingly.

**Course Content****UNIT I****300 Hours**

1. A candidate shall have dissertation for M.P.Ed.-IV semester and must submit his/her synopsis and get it approved by the Head of Department on the recommendation of D.R.C. (Departmental Research Committee).A candidate selecting dissertation must submit this/her dissertation not less than one week before the beginning of the 4<sup>th</sup> semester examination. The candidate has to face the Viva-Voce conducted by DRC.



**Course Name: Leadership Skills****Course Code: MPD402**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

**Course Outcomes**

1. This course is to facilitate the future leaders to develop essential Leadership skills needed to address complex sports issues.
2. It will facilitate the future leaders to develop essential Leadership skills needed to address complex sports issues.
3. It will enable students to understand the framework, the roles and functions of the leaders in an effective organization.
4. Understand the responsibilities of a sports leader

**Course Contents****Unit- I****05 Hours**

Leadership:

1. Introduction of leadership, Types of leadership, Theories of leadership, Qualities of an effective leader, Difference between leader & manager, How to develop leadership

**Unit- II****10 Hours**

1. Leadership Positions in Sports and Physical Education
2. Role and Contribution of Leader in Development and Promotion of Sports  
Meetings:
3. Notice of Meeting, The Agenda, Conducting a Meeting, Tips for a good Meeting, Minutes of Meeting, Report Writing

**Unit- III****10 Hours**

Communication:

1. Introduction of Communication, Types of communication, Methods of communication, Network of communication, Barriers to effecting communication, Press release, press conference, media coverage, Annual reports of individual and organization a performance

**Unit- IV****05 Hours**

Decision Making:

1. Introduction of Decision Making Sports, Types of managerial decisions, Models of decision-making
2. Fair Play in Sports

**Transaction Mode**

Lecture, Seminar, e-Team Teaching, e-Tutoring, Dialogue, Peer Group Discussion, Mobile Teaching, Self-Learning, Collaborative Learning and Cooperative Learning

**Text Books:**

- Fair Play in Sport Sigmund Loland: 2006
- Effective Leadership in Adventure Programming, Simon Priest, Michael A. Gass: 2005
- Outdoor Leadership Theory and Practice Bruce Martin, Christine Cashel, Mark Wagstaff, May Breuning: 2006
- Performance Leadership Frank Buytendijk: 2009
- Brilliant Leader Simon Cooper: 2010
- Sport Administration Manual International Olympic Committee