

GURU KASHI UNIVERSITY



Master of Physical Education

(M.P.Ed)

Session: 2025-26

Faculty of Physical Education

Post Graduate Attributes of the Programme:-

Types of learning outcomes	The Learning Outcomes Descriptors
Post Graduates should be able to demonstrate the acquisition of:	
Learning outcomes that are specific to interdisciplinary areas of learning	❖ Postgraduates will integrate knowledge from multiple disciplines such as sports science, education, psychology, sociology, management, biomechanics, technology, and health sciences.
	❖ They will demonstrate the ability to synthesize theoretical knowledge and practical skills to address complex challenges in physical education, coaching, fitness, and sports management.
	❖ They will apply interdisciplinary approaches to design and implement holistic physical education, training, and wellness programs for diverse populations.
	❖ They will use emerging technologies and innovative practices in enhancing sports performance, teaching, and fitness consultancy
Generic learning outcomes	❖ Postgraduates will demonstrate critical thinking, analytical reasoning, and problem-solving skills in academic, research, and professional contexts
	❖ They will exhibit effective communication skills in written, oral, and digital formats suitable for diverse audiences.
	❖ They will develop research aptitude through

	<p>independent inquiry, data collection, analysis, and scientific reporting in physical education and sports studies.</p>
	<p>❖ They will show leadership qualities, teamwork, and collaboration abilities to contribute positively in institutional, community, and industry settings.</p>
	<p>❖ They will nurture an entrepreneurial mindset with skills for self-employment, fitness consultancy, sports entrepreneurship, and start-ups.</p>
	<p>❖ They will embrace lifelong learning practices to continually update their knowledge and skills according to evolving trends and innovations.</p>

Programme Learning Outcomes: A post graduate Degree is awarded to students who have demonstrated the achievement of the outcomes located at level 6.5

Element of the Descriptor	Programme learning outcomes relating to postgraduate Degree
The post graduate should be able to demonstrate the acquisition of:	
Knowledge and understanding	<ul style="list-style-type: none"> ❖ Acquire in-depth knowledge in areas such as Research Process, Applied Statistics, Exercise Physiology, Sports Medicine, and Sports Psychology. ❖ Understand the scientific principles, training methods, and evaluation techniques in physical education and sports. ❖ Grasp the core and emerging concepts of Indian Health Sciences and Indian Knowledge Systems.
General, technical and professional skills required to perform and accomplish tasks	<ul style="list-style-type: none"> ❖ Develop skills in track and field athletics, combat sports, and game specialization. ❖ Learn scientific coaching, testing protocols, and biomechanical assessments and media communication techniques. ❖ Train in communication skills essential for coaching and leadership roles.
Application of knowledge and skills	<ul style="list-style-type: none"> ❖ Apply theoretical knowledge to practical performance and coaching contexts. ❖ Use statistical tools and research methods for analyzing sports science data. ❖ Integrate interdisciplinary learning in sports training, evaluation, and health practices.

<p>Generic learning outcomes</p>	<ul style="list-style-type: none"> ❖ Engage in self-directed learning, critical analysis, and problem-solving. ❖ Collaborate in team environments, showcasing interpersonal and leadership skills. ❖ Communicate effectively in written, oral, and digital formats.
<p>Constitutional, humanistic, ethical and moral values</p>	<ul style="list-style-type: none"> ❖ Understand and uphold values of equity, fair play, and ethics in sports. ❖ Promote health, well-being, and inclusivity through physical education. ❖ Integrate principles of Indian philosophy and wellness in practice.
<p>Employability and job-ready skills and capabilities/qualities and mindset</p>	<ul style="list-style-type: none"> ❖ Be equipped for roles such as sports coach, trainer, fitness expert, researcher, and statistical analyst. ❖ Gain entrepreneurial insights for competitive coaching. ❖ Develop a mindset geared toward lifelong learning, professional development, and industry adaptability.
<p>Credit requirements</p>	<ul style="list-style-type: none"> ❖ Completion of 48 credits across two semesters (24 credits each).
<p>Entry requirements</p>	<ul style="list-style-type: none"> ❖ A Bachelor of Physical Education (B.P.Ed) or Bachelor of Science in Health and Physical Education with atleast 50% marks.

Programme Structure

SEMESTER-I									
Course Code	Course Title	Type of Courses	L	T	P	No. of Credits	Int.	Ext.	Total Marks
MPD1400	Research Process in Physical Education and Sports Science	Core Course	4	0	0	4	30	70	100
MPD1401	Applied Statistics in Physical Education and Sports	Core Course	3	1	0	4	30	70	100
MPD1402	Track and Field-I	Skill Based	0	0	4	2	30	70	100
MPD1403	Game Specialization	Skill Based	0	0	4	2	30	70	100
MPD1404	Specialized Coaching for Competitive Exams	Entrepreneurship	2	0	0	2	30	70	100
IKS0016	Indian Knowledge System	Value Added Course	2	0	0	2	30	70	100
Discipline Elective-I (Opt any one of the following)									
MPD1405	Yogic Science	Discipline Elective-I	4	0	0	4	30	70	100
MPD1406	Test, Measurement and Evaluation in Physical Education								
Discipline Elective-II (Opt any one of the following)									
MPD1407	Scientific Principles of Sports Training	Discipline Elective-II	4	0	0	4	30	70	100
MPD1408	Sports Technology								
Total			19	1	8	24	240	560	800

SEMESTER-II									
Course Code	Course Title	Type of Courses	L	T	P	No. of Credits	Int.	Ext.	Total Marks
MPD2450	Physiology of Exercise	Core Course	4	0	0	4	30	70	100
MPD2451	Sports Medicine	Core Course	4	0	0	4	30	70	100
MPD2452	Sports Psychology	Core Course	3	1	0	4	30	70	100
MPD2453	Track and Field-II	Skill Based	0	0	4	2	30	70	100
MPD2454	Combat Sports	Skill Based	0	0	4	2	30	70	100
MPD2455	Communication Skills for Coaches and Trainers	Ability Enhancement Course	2	0	0	2	30	70	100
IKS0024	Introduction to Yoga Sutra	Value Added Course	2	0	0	2	30	70	100
Discipline Elective-III (Opt any one of the following)									
MPD2456	Sports Biomechanics and Kinesiology	Discipline Elective-III	4	0	0	4	30	70	100
MPD2457	Mass Media Communication Technology								
Total			19	1	8	24	240	560	800

Programme Learning Outcomes: A post graduate Degree is awarded to students who have demonstrated the achievement of the outcomes located at level 6.5

Element of the Descriptor	Programme learning outcomes relating to postgraduate Degree
The post graduate should be able to demonstrate the acquisition of:	
Knowledge and understanding	<ul style="list-style-type: none"> ❖ Demonstrate deep knowledge of curriculum design, sports management, athletic care, rehabilitation, value education and sports nutrition. ❖ Understand current trends and technologies in sports journalism, sports engineering and educational technology. ❖ Integrate knowledge from research, coaching and administration perspectives.
General, technical and professional skills required to perform and accomplish tasks	<ul style="list-style-type: none"> ❖ Gain hands-on expertise in game specialization, research proposal development, and proficiency in teaching. ❖ Apply sports science principles to rehabilitation, fitness, wellness, and journalism practices. ❖ Develop management and entrepreneurial skills required for careers in education, coaching, and sports industry roles.
Application of knowledge and skills	<ul style="list-style-type: none"> ❖ Undertake an independent research dissertation, showcasing the ability to investigate, analyze, and present findings. ❖ Apply classroom and field-based skills through service learning and teaching practice. ❖ Incorporate knowledge of health, safety, care, and nutritional practices into athletic development.
Generic learning outcomes	<ul style="list-style-type: none"> ❖ Exhibit effective teamwork, communication, and leadership in sports and academic settings.

	<ul style="list-style-type: none"> ❖ Adapt to emerging trends and technologies in sports science and physical education. ❖ Develop lifelong learning and critical thinking skills to solve real-world sports-related problems.
Constitutional, humanistic, ethical and moral values	<ul style="list-style-type: none"> ❖ Promote inclusive and value-based education through courses like Value and Environmental Education. ❖ Foster awareness of environmental sustainability and public health. ❖ Uphold sports ethics, equity, and fair competition standards.
Employability and job-ready skills and capabilities/qualities and mindset	<ul style="list-style-type: none"> ❖ Be job-ready for roles in sports coaching, education, sports journalism, fitness and rehabilitation, and sports administration. ❖ Build a professional mindset through entrepreneurship, media training, and technological applications. ❖ Prepare for research careers, academic roles, or industry-based professions.
Credit requirements	<ul style="list-style-type: none"> ❖ Semester 1 & 2: 48 credits ❖ Semester 3 & 4: 50 credits ❖ Internship: 4 credits ❖ Total: 102 credits for Completion of degree
Entry requirements	<ul style="list-style-type: none"> ❖ A Bachelor of Physical Education (B.P.Ed) or Bachelor of Science in Health and Physical Education with atleast 50% marks.

SEMESTER-III									
Course Code	Course Title	Type of Courses	L	T	P	No. of Credits	Int.	Ext.	Total Marks
MPD3500	Curriculum Design in Physical Education	Core Course	4	0	0	4	30	70	100
MPD3501	Sports Management	Core Course	4	0	0	4	30	70	100
MPD3502	Research Proposal	Skill Based	0	0	8	4	30	70	100
MPD3503	Game Specialization	Skill Based	0	0	4	2	30	70	100
MPD3504	Physical Education Consultancy	Entrepreneurship	2	0	0	2	30	70	100
Discipline Elective-IV (Opt any one of the following)									
MPD3505	Sports Journalism	Discipline Elective-IV	3	1	0	4	30	70	100
MPD3506	Sports Engineering								
Discipline Elective-V (Opt any one of the following)									
MPD3507	Physical Fitness and Wellness	Discipline Elective-V	3	1	0	4	30	70	100
MPD3508	Educational Technology in Physical Education								
Total			16	2	12	24	210	490	700

SEMESTER-IV									
Course Code	Course Title	Type of Courses	L	T	P	No. of Credits	Int.	Ext.	Total Marks
MPD4550	Athletic Care and Rehabilitation	Core Course	4	0	0	4	30	70	100
MPD4551	Dissertation	Research Based Skill	0	0	0	12	30	70	100
MPD4552	Service Learning	Skill Based	0	0	4	2	30	70	100
MPD4553	Internship (04 Week)	Skill Based	0	0	0	4	30	70	100
Discipline Elective-VI (Opt any one of the following)									
MPD4554	Value and Environmental Education	Discipline Elective-VI	3	1	0	4	30	70	100
MPD4555	Health Education and Sports Nutrition								
Total			7	1	4	26	150	350	500
Grand Total			61	5	32	98			

Semester-I

Course Name: Research Process in Physical Education and Sports Science	L	T	P	Cr
Course Code: MPD1400	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand and apply the basics of research methodology in research and project work, including selecting an appropriate research design.
2. Collect and edit data effectively and analyze it appropriately, enhancing their prospects in higher education.
3. Demonstrate the ability to choose research methods suitable for specific research objectives.
4. Develop proficiency in qualitative and quantitative data analysis and presentation techniques.

Course content**UNIT-I****14 Hours**

Research: its concept, nature, scope, need and Objectives of Research, Research types, Research methodology, Research process – Flow chart, description of various steps, Selection of research problem.

UNIT-II**16 Hours**

Research Design: Meaning, Objectives and Strategies of research, different research designs, important experimental designs,

Methods of Data Collection and Presentation: Types of data collection and classification, Observation method, Interview Method, Collection of data through Questionnaires, Schedules, data analysis and interpretation, editing, coding, content analysis and tabulation

UNIT-III**16 Hours**

Sampling Methods:

Different methods of Sampling: Probability Sampling methods, Random Sampling, Systematic Sampling, Stratified Sampling, Cluster Sampling and Multistage Sampling, Non-probability Sampling methods, Sample size

UNIT-IV

14 Hours

Report writing and Presentation: Types of reports, Report Format – Cover page, Introductory page, Text, Bibliography, Appendices, Typing instructions, Oral Presentation

Ethical Issues- Dishonesty, Ethical issues Regarding Copy right, responsibilities of researchers.

Transaction Mode:

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

Suggested Readings:

Text Books:

- *Panneerselvam, R, 'Research Methodology', PHI, New Delhi.*
- *Cooper, D. R., Schindler, P. S., 'Business Research Methods,' Tata McGraw Hill*
- *Gupta S P,' Statistical Methods', Sultan Chand & Sons, Delhi*
- *Ronald E Walpole, 'Probability and Statistics for Engineers and Scientists'(International Edition) , Pearson Education.*
- *Geode, Millian J. & Paul K. Hatl, "Methods in Research", McGraw Hills, New Delhi*

Reference Books:

- *Kothari C.R., "Research Methodology", New Age Publisher*
- *Nargundkar R, Marketing Research, Tata McGraw Hill, New Delhi, 2002*
- *Sekran, Uma, "Business Research Method", Miley Education, Singapore*

Course Name: Applied Statistics in Physical Education and Sports	L	T	P	Cr
Course Code: MPD1401	3	1	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Interpret 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. Analyze the Statistical data in the field of physical education and sports.

Course Content

UNIT-I 15 Hours

Introduction: Meaning, Definition, Need and Importance of Statistics in Physical Education

Types of Statistical Process: descriptive, comparative, inferential, predictive, Attribute and variable, Frequency distribution, raw scores, Single scores Types of data, Population and sample, Parameters and statistics

UNIT-II 15 Hours

Data Classification, Tabulation and Measures of Central Tendency: Meaning, uses and construction of frequency table, Meaning, purpose, calculation and advantages of Measures of central tendency, mean, median and mode.

Measures of Dispersions and Scales: Meaning, purpose, calculation and advances of Range, Quartile deviation, Mean deviation, Standard deviation, Probable error, meaning, purpose, calculation and advantages of scoring scales- Sigma scale, Z scale, Hull scale

UNIT-III 15 Hours

Probability Distributions and Graphs:

Normal curve: Meaning of probability, principles of normal curve, and properties of normal curve.

Divergence form normality: Skewness and Kurtosis,

Graphical representation in Statistics: Line diagram, bar diagram, Histogram, Frequency Polygon

UNIT IV**15 Hours****Inferential and Comparative Statistics:**

Tests of significance: Independent “t” test, dependent “t” test, chi square test, level of confidence and interpretation of data

Correlation: Meaning of correlation, co-efficient of correlation, calculation of co-efficient of correlation by the product moment method and rank difference method, 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, II 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. Senthil kumar Publications, Karaikudi.*

Course Name: Track and Field-I (Skill Based)	L	T	P	Cr
Course Code: MPD1402	0	0	4	2

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Master fundamental skills related to running, throwing and jumping events.
2. Demonstrate proficiency in ground marking in real game situations.
3. Independently perform game officiating duties with precision.
4. Acquire knowledge and skills related to sprints.

Course Content

60 Hours

Running Start

Starting Techniques: Standing Start, Crouch Start and Its Variations, Proper Use of Blocks, Rules and Their Interpretations and Duties of Officials

Change in Body Position during Running, Movements of the Arms, Stride Length and Frequency, Position of Torso While Running and at Finish

Advanced Skills: Various Techniques of Sprint Start, Bullet Start, Standing Start,

Finishing Techniques: Run Through, Forward Lunging (Torso finish), Shoulder Shrug. Ground Marking, Rules and Their Interpretations and Duties of Officials

Throwing:

Discus Throw: Basic Skills and Techniques of the Throwing Events Grip, Stance, Release, Reserve/ (Follow through Action) Ground Marking / Sector Marking, Rules and Their Interpretations and Duties of Officials

Jumping:

High Jump: Different Techniques of high jump, Rules and Their Interpretations and Duties of Officials

Course Name: Game Specialization (Skill Based)	L	T	P	Cr
Course Code: MPD1403	0	0	4	2

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

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

Course Content

60 Hours

Fundamental Skills, Rules and Regulations of any two games from the list -

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

Course Name: Specialized Coaching for Competitive Exams (Entrepreneurship)	L	T	P	Cr
Course Code: MPD1404	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. To familiarize students with the structure, content and patterns of competitive exams in physical education and sports.
2. To strengthen theoretical understanding of core topics included in national-level exams.
3. To enhance students' competence in answering objective and conceptual questions through a focused, syllabus-based approach.

Course Content

UNIT-I 7 Hours

Core Areas of Physical Education (Conceptual Review)

Foundations of Physical Education: Meaning, scope, aims and objectives

Anatomy and Physiology: Basic systems and their functions in sports performance

Kinesiology and Biomechanics: Motion types, levers, laws of motion

UNIT-II 7 Hours

Sports Psychology: Motivation, personality, arousal, anxiety, mental toughness

Training Methods: Principles, load, periodization, fitness components

UNIT-III 8 Hours

Test, Measurement & Evaluation: Types of tests, reliability, validity, motor fitness tests

Health Education: First aid, posture, nutrition, lifestyle diseases

Contemporary Issues: Doping, ethics in sports, women in sports

UNIT-IV 8 Hours

Teaching Aptitude and Research Methodology

Teaching Aptitude: Characteristics of effective teaching, methods, classroom communication

Research: Meaning, types, steps, sampling, hypothesis, data collection tools

Statistical Techniques: Mean, median, mode, SD, correlation, t-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:

- *UGC-NET Physical Education by Trueman's or Arihant*
- *B.S. Saraswati – Principles and History of Physical Education*
- *Beashel and Taylor – Anatomy and Physiology for Physical Education*
- *Kamlesh M.L. – Psychology in Physical Education and Sports*
- *Internet and NTA mock portals for updated exam content*

Course Name: Indian Knowledge System (VAC)	L	T	P	Cr
Course Code: IKS0016	2	0	0	2

Total Hours: 30

Course Objectives: This course focuses on introduction to science and technology of Indian Knowledge System and Indian perspective of modern scientific view.

Course Learning Outcome:

1. It aimed to instill in students a sense of rootedness and pride in India, along with an appreciation for its rich, diverse, ancient and modern culture, knowledge systems and traditions.
2. This course helps students understand the rich scientific and technological heritage of the country.
3. This course emphasizes and promotes the Indian concept of multidisciplinary learning systems, integrating them with modern science.
4. The course will underscore the importance of intellectual property rights in safeguarding Indian knowledge.

Course Content

UNIT-I

7 Hours

Ancient philosophy of Knowledge: Vedas, Vedangas, sutras, Gurukul parampara

UNIT-II

8 Hours

Astronomy in India: The Beginnings of Indian Astronomy, The Early Historical Period-The Siddhantic Era - The Kerala School - Aryabhata - Varahamihira- Bhaskara I – Brahamagupta- Bhaskara II – Brief notes on Astronomical instruments

UNIT-III

8 Hours

Chemistry in India: Early Chemical Techniques, Atomism in Vaisesika - Rishi Kanad- Nagarjuna- Al-Biruni', Vagbhata- Sushruta- Carak Metallurgy in India - Definition, Metallurgy in Harappan Civilization, Metallurgy of Gold-Copper-Zinc- Bronze - Iron and steel.

UNIT-IV

7 Hours

Developments in Mathematics: Number systems- Geometry- works of Pingala- Baudhayana- Jaina Mahavira-Sridharacharya – Madhava Siddanthas and Calender systems

Transactional Mode:

Seminars, Group discussion, Team teaching, Focused group discussion, Assignments, Project-based learning, Simulations, reflection and Self-assessment

Suggested Readings:

- *A Concise History of Science in India – Bose, Sen & Subbarayappa- INSA Publications*
- *Encyclopedia of Classical Indian Sciences- Roddam Narasimha, Universities Press*
- *NCERT Modules of KPTI*

Course Name: Yogic Science (Discipline Elective-I)	L	T	P	Cr
Course Code: MPD1405	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

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 15 Hours

Introduction to Yoga

Meaning, Definition, types, aims and objectives of yoga.

Importance of yoga in education & other fields of life.

Historical development of yoga from ancient to modern times.

Meaning and definition of astanga yoga: Yama, niyama, asana, pranayama, prathyahara, dharana, dhyana, Samadhi.

UNIT-II 15 Hours

Nadis, Asanas and Pranayam

Loosening exercise: Techniques and benefits.

Pranayam: Types, techniques and benefits, suryanamaskar, methods and benefits.

Nadis: Meaning, methods and benefits.

Asanas: Their benefits, types of Asanas, preparation & technique of different asanas and their effects on the body.

Chakras: Major chakras- Benefits of clearing and balancing chakras.

UNIT-III 14 Hours

Kriyas Shat Kriyas: Meaning, techniques and benefits of neti, dharti, kapalapathi, trataka, nauli, basti.

Bandhas: Meaning, techniques and benefits of jalendrbandha, jihvabandha, uddiyanabandha, mulabandha.

UNIT-IV 16 Hours

Mudras meaning, techniques and benefits of hasta mudras, asamyuktahastam, samyuktahastam, mana mudra, kaya mudra, banda mudra, adharamudra

Meditation Meaning, Techniques and benefits of meditation, Passive and

active meditation, saguna meditation and nirguna meditation.

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). Text Book 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 Housebook, Netherlands.*
- *Iyengar, B.K.S. (2000). Lighton Yoga. Harper Collins Publishers, NewDelhi.*

Course Name: Test, Measurement and Evaluation in Physical Education (Discipline Elective-I)	L	T	P	Cr
Course Code: MPD1406	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Identify the need & importance of test, measurement and evaluation in physical education
2. Analysis the 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: Meaning and Definition of test, measurement, evaluation, Principle and Scope of test, measurement and evaluation, Need and Importance of measurement and evaluation in physical education, Approach to measurements

UNIT-II

16 Hours

Motor Fitness Tests: Meaning and definition of motor fitness test,
Test for motor fitness: Indiana motor fitness test (for elementary and high school boys, girls and college men), Oregon motor fitness Test (separately for boys and girls), JCR test Motor ability, Barrow motor ability test, Newton motor ability Test

Muscular Fitness test: Kraus-weber minimum muscular fitness test

Physical fitness test: American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) health related fitness battery (revised in 1984), American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) youth physical fitness test, American College of Sports Medicine (ACSM) health related physical fitness test, Roger's physical fitness Index

Cardio vascular test: Harvard step test, 12 minutes run /walk test, Multi-stage fitness test (Beep test)

UNIT-III**15 Hours****Physiological testing:**

Aerobic capacity: The Bruce treadmill test protocol, 1.5mile run test for college age males and females

Anaerobic Capacity: Margariakala men test, Wingate anaerobic test

Anthropometric measurements: Method of measuring height, standing height, sitting height

Method of measuring Circumference: Arm, waist, hip, thigh,

Method of measuring skin folds: Triceps, sub-scapular, suprailiac and pectoral major

UNIT-IV**15 Hours****Sports Skills Test:**

Basketball: Johnson basketball test, Knox basketball test, Harrison basketball test

Badminton: Lockhart Mc. Pherson badminton test, French short & long serve test, Hicks badminton test

Hockey: Henry Fridal field hockey test, Schmithal's dribble, dodge, circular tackle & drive, Schmithal's goal shooting, field & drive test

Soccer: Johnson soccer test. Shautele's volleying, passing & recovery test, Shautele's Judgment in passing test

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, (2nd 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, 2nd Edition. John Wiley and Sons, Inc, New York.*
- *Jenson, Clayne R. and Cynthia, C. Hirst. (1980). Measurement in Physical Education and Athletics Macmillan*

Course Name: Scientific Principles of Sports Training (Discipline Elective-II)	L	T	P	Cr
Course Code: MPD1407	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

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 of Sports training: Definition, aim, characteristics, principles of sports training.

Over load: Definition causes of over load, symptoms of over load. Remedial measures: Super compensation, altitude training, cross training.

UNIT-II 15 Hours

Methods of Training:

Meaning and definition of Training, Importance, Principles, Types of training - Weight training, Circuit training, Interval training, Fartlek training, Cross-Country and Plyometric training.

Training means and methods: Types, Classification of Physical Exercise, Basic Methods of Conditioning.

Muscular Adaptations to Aerobic and Anaerobic training: Fiber Composition, Oxygen Delivery, Energy Production.

UNIT-III 14 Hours

Flexibility:

Meaning and definition of Flexibility, Methods to improve the flexibility stretch and hold method, ballistic method.

Specials type Training:

Plyometric training, Training for coordinative abilities, methods to improve coordinative abilities. Sensory method, variation in movement execution method, Variation in external condition

method, combination of movement method, types of stretching exercises.

UNIT-IV

17 Hours

Training Plan:

Training Plan, Macro cycle, meso cycle, micro cycle. Short term plan and long-term plan.

Periodization: Meaning, single, double and multiple periodization, preparatory period, competition period and transition period.

Doping: Definition of doping, side effects of drugs, dietary supplements, IOC list of doping classes and methods.

Blood doping: The use of erythropoietin in blood boosting, blood doping control, the testing program, problems in drug detection. Blood testing in doping control problems with the supply of medicines Course to IOC regulations. 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. K lafs & Daniel, D. Arnheim (1999). Modern Principles of Athletic Training. C. V. Mosphy Company, St. Louis.*
- *Daniel, D. Arnheim (1991). Principles of Athletic Traning. Mosby Year Book, St. Louis.*
- *David, R. Mottram (1996). Drugs in Sport. School of Pharmacy, John Moore University, Liverpool.*
- *Gary, T. Moran (1997). Cross Training for Sports. Human Kinetics, Canada.*

Course Name: Sports Technology (Discipline Elective-II)	L	T	P	Cr
Course Code: MPD1408	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Identify design of sports equipment and develop skills to optimize 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 15 Hours

Sports Technology:

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

Technology in Physical Education and Sports: Initiating technology, Use of Audio/Video technology, Image analysis, Technological devices used in Physical activity and sports, Techniques of presentation and class management skills

UNIT-II 14 Hours

Surfaces of Play fields: Modern surfaces for play fields, construction and installation of sports surfaces.

Types of materials: Synthetic, wood, polyurethane. Artificial turf. Modern technology in the construction of indoor and outdoor facilities. Technology in manufacture of modern play equipment's. Use of computer and software in Match Analysis and Coaching.

UNIT-III 15 Hours

Modern Equipment: Playing equipment's: Balls- Types, materials and advantages. Bat/Stick/: Types, materials and advantages.

Clothing and shoes: Types, materials and advantages.

Measuring equipment's: Throwing and jumping events.

Protective equipment's: Types, materials and advantages. Sports

equipment with nanotechnology, advantages.

UNIT-IV

16 Hours

Training Gadgets:

Basketball: Ball feeder, mechanism and advantages.

Cricket: Bowling machine, mechanism and advantages,

Tennis: Serving machine, mechanism and advantages,

Volleyball: Serving machine mechanism and advantages.

Lighting facilities: Method of erecting flood light and measuring luminous.

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*. Jai co-Publisher, UK.
- Mongilo, J. (2001). *Nano Technology 101*. Greenwood publishing group, New York.
- Walia, J. S. 1999). *Principles and Methods of Education*. Paul Publishers, Jalandhar.
- Kochar, S.K. (1982). *Methods and Techniques of Teaching*. Sterling Publishers Pvt. Ltd, New Delhi, Jalandhar.
- Kozman, Cassidy and Jackson. (1952). *Methods in Physical Education*. W. B. Saunders Company, Philadelphia and London.

Semester-II

Course Name: Physiology of Exercise	L	T	P	Cr
Course Code: MPD2450	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

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** **14 Hours**

Skeletal Muscles and Exercise: Meaning, Nature, Scope and Importance of Exercise Physiology in Games and Sports. Macro & micro structure of the skeletal muscle.

Chemical composition: Sliding filament theory of muscular contraction. Types of muscle fiber, Muscle tone.

UNIT-II **16 Hours**

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.

Respiratory System and Exercise:

Mechanics of breathing: Respiratory muscles, minute ventilation, ventilation at rest and during exercise.

Diffusion of gases: Exchange of gases in the lungs, exchange of gases in the tissues, control of ventilation, ventilation and the anaerobic threshold.

Oxygen debt: Lung volumes and capacities, Effect of exercises and training on the respiratory system.

UNIT-III**14 Hours****Metabolism and Energy Transfer:**

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

UNIT-IV**16 Hours****Climatic conditions and sports performance and ergogenic aids:**

Variation in temperature and Humidity: Thermos regulation, sports performance in hot climate, Cool Climate, high altitude.

Influence of Amphetamine, Anabolic steroids, Androstenedione, Beta Blocker, Choline, Creatine, Human growth hormone on sports performance.

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. Poompugar Pathipagam, Madras.*
- *Beotra, A. (2000). Drug Education Handbook on Drug Abuse in Sports. Sports Authority of India, Delhi.*
- *Clarke, D.H. (1975). Exercise Physiology. Prentice Hall 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: Sports Medicine	L	T	P	Cr
Course Code: MPD2451	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

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

Basic Rehabilitation: Basic Rehabilitation, Strapping/tapping, definition, principles precautions contraindications.

Proprioceptive neuromuscular muscular facilitation: Definition hold, relax, repeated contractions.

Show reversal technique exercises. Isotonic, Isokinetic, Isometric.

Stretching: Definition, types of stretching, advantages, dangers of stretching, manual muscle grading.

UNIT-II **14 Hours**

Age and gender consideration in sports: Biological, chronological age and age determination. Suitability of sports at various stages of growth. Special problems women and sports performance. Exercise benefits at various stages of life.

Physical, physiological, bio-chemical and bio-mechanical difference between men & women.

UNIT-III **15 Hours**

Upper Extremity Injuries and Exercise

Upper limb and thorax injuries: Shoulder- sprain, strain,

dislocation and strapping.

Elbow- sprain, strain, strapping.

Wrist and Fingers- sprain strain, strapping. Thorax, Rib fracture. Breathing exercises, relaxation techniques, free hand exercise, stretching and strengthening exercise for shoulder, elbow, wrist and hand.

Supporting and aiding techniques and equipment for upper limb and thorax injuries.

UNIT-IV

15 Hours

Lower Extremity Injuries and Exercise

Lower limb and abdomen injuries: Hip- adductor strain, dislocation, strapping. Knee- sprain, strain, strain, strapping.

Ankle- sprain, train, strapping.

Abdomen- Abdominal wall, contusion, abdominal muscle strain.

Free exercises–Stretching and strengthening.

Exercise for Hip, knee, ankle and Foot.

Supporting and aiding techniques and equipment for lower limb and abdomen injures.

Practical lab:

Practical and visit to physiotherapy center to observe treatment procedure of sports injuries; data collection of sports injury incidences, visit to TV center 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 Litho Ltd., 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. Khel Shitya Kendra, New Delhi.*
- *The Encyclopedia of Sports Medicine. (1998).*

Course Name: Sports Psychology	L	T	P	Cr
Course Code: MPD2452	3	1	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

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 sports persons and their coping techniques.

Course Content

UNIT-I 15 Hours

Sports Psychology and Sensory Perceptual Process: Meaning and scope of sport psychology. Importance of sport psychology. Divisions of sport psychology. Sensory Perceptual Process. Meaning, mechanism and stages of sensory perceptual process. Classification of senses and sensory perceptual process. Factors in perception Implication of sensory-perceptual process in exercise and sport

UNIT-II 14 Hours

Motivation: Meaning and definition, types of motivation: Intrinsic, extrinsic.

Achievement motivation: Meaning, measuring of achievement motivation.

Anxiety: Meaning and definition, nature, causes, method of measuring anxiety. Competitive anxiety and sports performance.

Stress: Meaning and definition, causes. Stress and sports performance.

Aggression: Meaning and definition, method of measurement. Aggression and sports performance.

Self-concept: Meaning and definition, method of measurement.

UNIT-III 16 Hours

Goal Setting: Meaning and definition, process of goal setting in physical education and sports.

Relaxation: Meaning and definition, types and methods of psychological relaxation.

Psychological tests: Types of psychological test-Instrument based

tests (Pass along test, Tach is to scope, Reaction timer, Finger dexterity board, Depth perception box, Kinesthesio meter board).

Questionnaire: Sports achievement motivation, sports competition anxiety.

Sports Sociology: Meaning and definition, sports and socialization of individual sports as social institution. National integration through sports,

Fans and spectators: Meaning and definition, advantages and disadvantages on sports performance.

Leadership: Meaning, definition, types. Leadership and sports performance.

UNIT-IV

15 Hours

Group Cohesion:

Group, Definition and meaning, group size, group son composition, group cohesion, group interaction, group dynamics. Current problems in sports and future directions, sports social crisis management.

Women in sports: Sports women in our society, participation pattern among women, gender in equalities in sports.

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 Sahety Kendre Publishers.*
- *Jay Coakley. (2001). Sports in Society– Issues and Controversies in International Education. Mc-Craw Seventh Ed.*
- *John D Lauther (2000). Psychology of Coaching. Prenticce Hall Inc., New Jersy.*
- *Miroslaw Vauks & Bryant Cratty (1999). Psychology and the Superior Athlete. The Macmillan, London.*

Course Name: Track and Field-II (Skill Based)	L	T	P	Cr
Course Code: MPD2453	0	0	4	2

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Learn about the starting and finishing techniques of running
2. Become competent in ground marking for athletic events
3. Summarize and interpret the rules & regulations of running events
4. Gain expertise in clearance and landing techniques

Course Content

60 Hours

Starting, Finishing Techniques of Running events and their rules:

Starting techniques: Standing start, Crouch start and its variations, Proper use of blocks

Finishing Techniques: Run, Through, forward lunging, Shoulder Shrug. Ground Marking, Rules and Officiating

Hurdles: Fundamental Skills-Starting, Clearance and Landing Techniques, Types of Hurdles

Relays: Fundamental Skills, Various patterns of Baton Exchange, Understanding of Relay Zones

Ground Marking and Officiating: Ground Marking and Officiating, Interpretation of Rules and Officiating

Course Name: Combat Sports (Skill Based)	L	T	P	Cr
Course Code: MPD2454	0	0	4	2

Total Hours: 60

Course Learning Outcomes: After completing this course, the learner will be able to:

1. Exhibit and assess fundamental and advanced techniques of selected combative sports.
2. Understand, interpret, and apply the official rules of the chosen games.
3. Officiate matches with confidence and accuracy.
4. Demonstrate advanced-level skills and strategies in selected combative games.

Course Content

Fundamental and Advanced Skills and rules and regulations of Any Two Combative Games (from the following list):

- Karate
- Judo
- Fencing
- Boxing
- Taekwondo
- Wrestling
- Wushu

Course Name: Communication Skills for Coaches and Trainers (AEC)	L	T	P	Cr
Course Code: MPD2455	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completing this course, the learner will be able to:

1. Demonstrate effective communication in a range of coaching and training situations.
2. Adapt their communication style based on athlete needs and settings.
3. Motivate and instruct athletes more clearly and confidently.
4. Utilize digital tools and media responsibly in coaching environments.

Course Content

UNIT-I

7 Hours

Meaning, types and process of communication

Elements of effective communication (sender, message, medium, feedback)

Verbal and non-verbal communication in sports

Barriers to communication and how to overcome them

Importance of communication for coaches and trainers

UNIT-II

8 Hours

Coach-athlete communication: building trust and respect

Active listening and feedback techniques

Communicating with different age groups and ability levels

Handling conflict and criticism positively

Ethical communication and confidentiality in sports settings

UNIT-III

7 Hours

Using communication to motivate athletes and teams

Instructional clarity: explaining drills, tactics and techniques

Role of tone, timing and body language in feedback

Use of cues, demonstrations and questioning strategies

Communication during competition and high-pressure situations

UNIT-IV

8 Hours

Use of digital media (video, WhatsApp, presentations) for coaching

Communicating with parents, sponsors and support staff

Press interaction and social media communication
Writing reports, fitness plans and session summaries
Public speaking skills for seminars, workshops and team talks

Transaction Mode:

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

Suggested Readings:

- *Martens, R. – Successful Coaching*
- *Weinberg & Gould – Foundations of Sport and Exercise Psychology*
- *Kumar, K. – Communication Skills for Professionals*
- *Online resources and coaching communication workshops*
- *NIS Manuals and Sport Authority of India modules on athlete interaction*

Course Name: Introduction to Yoga Sutra	L	T	P	Cr
Course Code: IKS0024	2	0	0	2

Total Hours: 30

Course Objective:

Impart traditional wisdom of Ashtanga yoga as quoted by Maharshi Patanjali. Emphasize the core psychological and spiritual transformation outlined in Maharshi Patanjali's eightfold framework. Cultivate understanding of yoga beyond physical exercise, focusing on unfolding latent divinity within individuals. Enhance students' personality traits conducive to leading a harmonious and peaceful existence. Promote awareness of yoga as a transcendental spiritual practice rather than just a system of physical fitness.

Course Learning Outcome: After completing this course, the learner will be able to:

1. **Comprehensive Understanding of Yoga Philosophy:** Students will study foundational texts such as the Sankhya Darshana, Patanjali Yogasutras, and the Bhagavad-Gita to gain deep theoretical insights into diverse yogic traditions and practices.
2. **Proficiency in Ashtanga Yoga and Ethical Analysis:** Learners will demonstrate knowledge and application of the eight limbs of Ashtanga Yoga, while critically analyzing positive and negative human behaviors as presented in classical yogic literature.
3. **Application of Ancient Values to Modern Life:** Students will explore the relevance of ancient Indian philosophical and moral values in contemporary society, using them to cultivate personal ethics and social harmony.
4. **Integration of Yogic Principles for Holistic Development:** Learners will develop the ability to incorporate yoga's philosophical, practical, and ethical teachings into their personal and professional lives, supporting holistic well-being and self-realization.

Course Content

UNIT-1

8 Hours

Philosophy of Yoga

Yoga (Meaning and Definition), Importance of Yoga, Introduction to Bharatiya Yoga Darshana,

Various paths to Yoga: Jnana, Bhakti, Karma, Ashtanga and Hatha Yoga, Yoga and Sampradayas.

UNIT-1I

7 Hours

Manas and Sharira - Maintenance and Cleansing
Yoga Culture and Value Education, Mental and Physical Aspects of the Body

UNIT-III

8 Hours

Applications of Yoga

Practical Application of Yoga to Life, Modern view of Yoga, Application of principles of Yoga for holistic living, Management Techniques, Psychology, Application of Yoga in Defense

UNIT-IV

7 Hours

Tutorials: Ashtanga Yoga Sutras, discussion of Asanas and eight angas with examples, recitation and memorization of important sutras in this context

Tutorials: Yoga for Students (Includes Theory)

- a. Surya Namaskaras
- b. Basic Pranayama and Kriyas
- c. Eyesight improvement
- d. Voice Culture
- e. Focus and concentration techniques
- f. Memory improvement techniques
- g. Relaxation technique

Transactional Mode:

Seminars, Group discussion, Team teaching, Focused group discussion, Assignments, Project-based learning, Simulations, reflection and Self-assessment

Learning Resources: Text books

- *Patanjali Yog Darshan based on Vyasa Bhashya, by Dr. P. V. Karambelkar, Publishers - Kaivalyadham, Lonavla*
- *Online Resources:*
<https://dharmawiki.org/index.php/Category:Yoga>

Suggested Readings:

- *Hatha Pradipika of Swami Svatmarama, Edited by Swami Digambarji and Kokaje, Publisher: Kaivalyadham, Lonavala*

- *Spirituality and Indian psychology by DPS Bhawuk, Publisher: Springer, New York*
- *Universal Message of the Bhagavad Gita by Swami Ranganathananda*
- *Essays on the Gita, Vol. 13 by Sri Aurobindo, Publisher: Arya Publishing House, Calcutta*
- *Management with a Difference: Insights from Ancient Indian Wisdom by Swami Anubhavanada & A. Kumar, Publisher: Ane Books India, New Delhi*
- *Management Lessons from Patanjali's Yoga Sutras by Swami Bodhananda Saraswati, Publisher: Ahmedabad Management Association*
- *Mind and Self: Patanjali's Yoga Sutra and Modern Science by Subhash Kak, Publisher: Mount Meru Publishing*
- *Various books from Bihar School of Yoga, Munger, Bihar, India*

Course Name: Sports Biomechanics and Kinesiology (Discipline Elective-III)	L	T	P	Cr
Course Code: MPD2456	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completing this course, the learner will be able to:

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: Meaning, nature, role and scope of applied kinesiology and Sports Biomechanics.

Meaning of axis and planes, Dynamics, kinematics, kinetics, Statics.

Centre of gravity, Line of gravity, Plane of the body and axis of motion, Vectors and Scalars.

UNIT-II 15 Hours

Muscle Action: Structural classification of muscles, characteristics of muscle tissue, muscles fiber types, Reciprocal innervation, all or none law, Types of muscles contraction, Role of muscles, Angle of pull, Two-joint muscles, Reflex-action, 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: Meaning and definition of motion.

Types of motion: Linear motion, angular motion, circular motion, uniform motion. Principals related to the law of Inertia, law of acceleration and law of counter force.

Meaning and definition of force, sources of force, force components. Force applied at an angle pressure. Centripetal force centrifugal force.

Friction: Buoyancy. Spin.

UNIT-IV**16 Hours**

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

Analysis of movement: Types of analysis, Kinesiological, Biomechanical. Cinematographic.

Methods of analysis: qualitative, quantitative, predictive. 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). Manav Kriya Vigyan–Kinesiology (Hindi Edition). Amravati. Hanuman Vyayam Prasarak Mandal.*
- *Hoffman, S. J. (2005). Introduction to Kinesiology. Human Kinesiology publication In.*
- *Steven Roy, & Richard Irvin. (1983). Sports Medicine. Prentice Hall Inc., New Jersery.*
- *Thomas. (2001). Manual of structural Kinesiology. Mc Graw Hill, New York.*
- *Uppal, A. K. & Lawrence, Mamta. (2004). M P 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: Mass Media Communication Technology (Discipline Elective-III)	L	T	P	Cr
Course Code: MPD2457	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completing this course, the learner will be able to:

1. Explain the principles of mass media and their applications in the sports and fitness industry.
2. Produce basic content for print, broadcast and digital platforms.
3. Utilize communication technology effectively in coaching, reporting, and teaching.
4. Critically evaluate the impact of media in shaping public perception and athlete branding.

Course Content

UNIT-I **15 Hours**

Introduction to Mass Media and Communication

Definition, nature and types of mass communication

Functions and characteristics of mass media

Evolution of media: print, radio, television, film, internet

Role of mass media in sports promotion and education

Media ethics and regulations

UNIT-II **15 Hours**

Print Media in Sports Communication

Newspapers, magazines and journals: their impact on public opinion

Writing sports news, features and press releases

Designing sports newsletters, brochures and handouts

Role of journalists and reporters in sports events

Media management during sports competitions

UNIT-III **13 Hours**

Broadcast Media and Sports

Radio commentary and sports broadcasting techniques

Television coverage: live telecast, interviews and sports anchoring

Scriptwriting for sports programs

Role of sports channels and sponsorship

Impact of media coverage on athlete image and sports popularity

UNIT-IV

17 Hours

Digital and Social Media Technologies

Social media platforms: YouTube, Instagram, Facebook, X (Twitter) in sports promotion

Live streaming and podcasting in sports

Digital marketing and content creation for sports entities

Mobile apps and online tools for communication

Cybersecurity and responsible use of digital media

ICT in sports coaching and physical education

Video analysis, virtual coaching and wearable tech

Use of multimedia tools (PowerPoint, Canva, editing software)

Online teaching platforms (Zoom, Google Meet) and LMS tools

Transaction Mode:

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

Suggested Readings:

- *Keval J. Kumar – Mass Communication in India*
- *Denis McQuail – Mass Communication Theory*
- *Firoz – Mass Media and Sports*
- *John Rowe – Sports, Culture and the Media*
- *Online courses (Coursera, NPTEL) on Digital Media & Communication Manuals by SAI and Ministry of Sports on Media Handling*

Semester-III

Course Name: Curriculum Design in Physical Education	L	T	P	Cr
Course Code: MPD3500	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completing this course, students will be able to:

1. Understand and apply foundational principles of curriculum design.
2. Critically evaluate and implement different curriculum models in physical education.
3. Develop comprehensive and inclusive curricula tailored to different learner groups.
4. Apply assessment tools and incorporate innovative trends in curriculum planning.

Course Content**UNIT-I** **15 Hours****Foundations and Principles of Curriculum Design**

Definition and scope of curriculum in physical education

Objectives and significance of curriculum development

Difference between curriculum and syllabus

Bases of curriculum: philosophical, sociological, psychological, and scientific

Principles of curriculum construction

National Curriculum Framework (NCF), NEP 2020 and curriculum guidelines for physical education

UNIT-II **15 Hours****Curriculum Models and Approaches in Physical Education**

Curriculum models: Subject-centered, Activity-based, Learner-centered and Experience-based models

Modern approaches: Inclusive, Interdisciplinary, Competency-based learning

Types of Curriculum: Core, Enrichment, Co-curricular, and hidden curriculum

Role of statutory bodies (NCERT, NCTE, UGC, CBSE) in curriculum formulation

Curriculum alignment with learning outcomes and assessments

UNIT-III**15 Hours****Curriculum Planning, Implementation and Instruction****Levels of curriculum planning:** Annual, unit, and lesson plans**Curriculum design for various levels:** primary, secondary, higher education and professional training

Time allotment, content sequencing and learner readiness

Instructional strategies and pedagogy in physical education

Integration of ICT, technology and experiential learning in teaching physical education

Role of the teacher in curriculum delivery

UNIT-IV**15 Hours****Curriculum Evaluation, Innovation, and Emerging Trends**

Need and importance of curriculum evaluation

Techniques and tools for curriculum assessment

Feedback and curriculum revision process

Curriculum research and development in physical education

Emerging themes: sports literacy, wellness education, life skills integration, fitness-based curriculum

Designing innovative curriculum modules for contemporary needs

Transaction Mode:

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

Suggested Readings:

- *L. Kelly – Foundations of Curriculum in Physical Education*
- *Jewett, Bain & Ennis – Curriculum Design in Physical Education*
- *Charles & Rink – Teaching Physical Education for Learning*
- *NCERT & NCTE Curriculum Frameworks*
- *NEP 2020 & NCF 2005/2023 Documents*
- *SAI & UGC Guidelines on Physical Education Curriculum*

Course Name: Sports Management	L	T	P	Cr
Course Code: MPD3501	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completing this course, the learner will be able to:

1. Explain the concept of sports management in their own words.
2. Organize and oversee physical education and sports events effectively.
3. Demonstrate proficiency in financial management and the creation of budgets for sports events.
4. Acquire knowledge about various sports events and their development.

Course Content

UNIT-I 15 Hours

Management in Physical Education and Sports: Concept, Meaning, Need and Scope of Sports Management

Functions of Management: Planning, Organizing, Staffing, Directing, Controlling and Evaluating

Management Skills: Personal Interpersonal Skills, Conceptual and Technical Skills

UNIT-II 15 Hours

Managerial Roles: Interpersonal Roles, Informational Roles, Decision Making Roles

Qualities and Qualification of a Manager: Personal Qualities, Leadership Qualities, Academic and Professional Qualities

Personal Management: Introduction, Meaning, Principle Aspects of Personal Management

UNIT-III 14 Hours

Job Analysis: Descriptions and Specifications

The Budget: Meaning, Definition and Objectives of the Budget, Principles of Planning a Sports Budget

Management of Facilities: Introduction, Administration and General Principles of Planning Facilities, Types of Facilities, Facility Requirements, Management of Sports Infrastructure - Indoor Facilities, Gymnasium and Swimming Pool.

UNIT-IV**16 Hours**

Management of Equipment's and Materials: Introduction, Meaning, Need and Importance, Types, Principles of Purchase, Equipment Care, Maintenance and Disposal

Intramural and Extramural Competitions, Public Relations, Offices and Officials

Communication: Meaning, Types of Communications and Barriers in Effective Communication.

Transaction Mode:

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

Suggested Readings:

- *M.L. Kamlesh. Management Concepts in Physical Education and Sport (2nd revised and updated ed.); New Delhi; Khel Sahitya Kendra, (2016)*
- *P. Cherlladurai. Sport Management – Macro Perspectives; London, Ontario(Canada); Sports Dynamics (1985)*
- *Allen, L.A. Management & Organization. Kogakusha Co. Tokyo, 1988.*
- *Hert, Renis, New Patterns of Management, McGraw Hill, 1961.*
- *Sandhu, K. Sports Dynamics: Psychology, Sociology and Management Sivia,*
- *G.S. Sports Management in Universities*

Course Name: Research Proposal (Skill Based)	L	T	P	Cr
Course Code: MPD3502	0	0	8	4

Total Hours: 120

Course Learning Outcomes: After completing this course, the learner will be able to:

1. Identify and formulate a clear, relevant and researchable problem in the field of physical education and sports.
2. Review and analyze Literature critically to build a strong theoretical and conceptual framework.
3. Design Research Methodology including appropriate sampling, tools, techniques and data collection methods.
4. Construct a Structured Research Proposal following academic and ethical guidelines.
5. Present and defend the proposal effectively using oral and written communication skills.
6. Demonstrate Academic Integrity by properly citing references and avoiding plagiarism.

Course Content

Identification and Formulation of Research Problem

- Selection of research area and topic
- Statement of the research problem
- Formulation of title, objectives, and hypotheses
- Delimitation and significance of the study

Review of Related Literature and Framework

- Identification and use of sources (books, journals, theses, e-resources)
- Writing review of literature
- Preparation of annotated bibliography
- Development of theoretical and conceptual framework

Methodology Planning

- Selection of research type and design
- Determination of population, sample and sampling techniques
- Identification of variables and tools/instruments
- Planning for data collection and procedure

Proposal Writing and Presentation

- Structure and components of a research proposal
- Writing references and citations (APA format)
- Preparation of synopsis/research proposal

- Oral presentation and defence of the proposal

Suggested Readings:

- *Kothari, C. R. Research Methodology: Methods and Techniques*
New Age International Publishers
- *Best, J. W. & Kahn, J. V. Research in Education* *Pearson Education*
- *Thomas, J. R., Nelson, J. K., & Silverman, S. J. Research Methods in Physical Activity* *Human Kinetics*
- *Gratton, C., & Jones, I. Research Methods for Sports Studies* *Routledge*
- *APA Publication Manual (Latest Edition)* *American Psychological Association*
- *Shodhganga (INFLIBNET) –*
<https://shodhganga.inflibnet.ac.in>
(For accessing Indian theses and research reviews)
- *Google Scholar – <https://scholar.google.com>*
(For scholarly articles and citations)
- *Mendeley/Zotero (For reference management and citation tools)*

Course Name: Game Specialization (Skill Based)	L	T	P	Cr
Course Code: MPD3503	0	0	4	2

Total Hours: 60

Course Learning Outcomes: After completing this course, the learner will be able to:

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

Course Content

Specialization in any three games

Badminton, Table Tennis, Lawn Tennis, Rugby, Fencing, Gymnastics, Wrestling, Judo

Course Name: Physical Education Consultancy (Entrepreneurship)	L	T	P	Cr
Course Code: MPD3504	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Upon completion of the course, students will be able to:
2. Explain the role and scope of consultancy in physical education and sports.
3. Develop a comprehensive plan to start and operate a consultancy business.
4. Apply marketing and client management strategies effectively.
5. Practice ethical standards and professionalism in consultancy services.

Course Content

UNIT-I 7 Hours

Introduction to Consultancy and Entrepreneurship

Meaning and nature of consultancy in physical education and sports

Role of a consultant: required skills, ethics and professional responsibilities

Understanding entrepreneurship: definition, characteristics and importance

Distinguishing between trainer, coach and consultant

UNIT-II 8 Hours

Setting up a Consultancy Business

Identifying consultancy opportunities in physical education, fitness and wellness sectors

Legal requirements, business registration processes and licenses needed for consultancy

Preparing a business plan: mission and vision statements, services offered, and financial planning

UNIT-III 7 Hours

Marketing Strategies for Consultancy

Promotion and branding techniques for consultancy services

Building online presence through websites, social media and digital platforms

Strategies for client acquisition and maintaining client relationships

UNIT-IV

8 Hours

Client Management and Business Operations

Pricing strategies, contract preparation, and invoicing

Ethical considerations and confidentiality in consultancy

Managing client expectations and service delivery standards

Transaction Mode:

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

Suggested Readings:

- *Kuratko, D. F. – Entrepreneurship: Theory, Process, and Practice*
- *Hisrich, R. D., Peters, M. P., & Shepherd, D. A. – Entrepreneurship*
- *Sarasvathy, S. D. – Effectuation: Elements of Entrepreneurial Expertise*
- *Boone, L. E., & Kurtz, D. L. – Contemporary Marketing*
- *Relevant research papers and articles on sports consultancy and entrepreneurship*

Course Name: Sports Journalism (Discipline Elective-IV)	L	T	P	Cr
Course Code: MPD3505	3	1	0	4

Total Hours: 60

Course Learning Outcomes: After completing this course, the learner will be able to:

1. Demonstrate an understanding of the structure, types and preparation of sports bulletins for various media platforms.
2. Analyze the role and impact of mass media, including radio, television and print, in the dissemination of sports news and commentary.
3. Develop skills in sports reporting, including writing detailed and accurate reports on national and international sporting events.
4. Apply practical techniques in observing sports events, compiling reports and preparing news articles suitable for publication.
5. Gain firsthand exposure to the functioning of news organizations through visits, enhancing understanding of journalistic processes.
6. Create and manage collections of sports news materials to support sports media education and research.

Course Content

UNIT-I 14 Hours

Introduction: Meaning and definition of journalism, ethics of journalism, canons of journalism, Sports ethics and sportsmanship, reporting sports events, National and International sports news agencies

UNIT-II 15 Hours

Sports Bulletin:

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

UNIT-III**15 Hours****Mass Media:**

Mass media in journalism: Radio and T.V. commentary, running commentary on the radio, Sports expert's comments, role of advertisement in journalism, Sports photography, equipment, editing, publishing

UNIT-IV**16 Hours**

Report Writing on Sports: Brief review of Olympic Games, Asian Games, Common Wealth Games World Cup, National Games and Indian Traditional Games, Preparing report of an annual sport meet for publication in newspaper organizations of press meet

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: Setto Indian context Ed3. Delhi: Surjeet Publications*
- *Ahiya B.N. Chobra S.S.A. (1990) Concise Course in Reporting. New Delhi: Surjeet Publication*
- *Bhatt S.C. (1993) Broadcast Journalism Basic Principles. New Delhi. Haran and Publication*
- *Dhananjay Joshi (2010) Value Education in Global Perspective. New Delhi: Lotus Press.*
- *Kannan K (2009) Soft Skills, Madurai: Madurai: Yadava College Publication*
- *Mohit Chakrabarti (2008): Value Education: Changing Perspective, New Delhi: Kanishka Publication.*
- *Padmanabhan. A & Perumal A (2009), Science and Art of Living, Madurai: Pakavathi Publication*
- *Shiv Khera (2002), You Can Win, New Delhi: Macmillan India Limited.*
- *Varma A. K. (1993) Journalism in India from Earliest Times to the Present Period. Sterling publication Pvt. Ltd.*
- *Venkataiah. N (2009) Value Education, New Delhi: APH Publishing Corporation.43*

Course Name: Sports Engineering (Discipline Elective-IV)	L	T	P	Cr
Course Code: MPD3506	3	1	0	4

Total Hours: 60

Course Learning Outcomes: After completing this course, the learner will be able to:

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 15 Hours

Introduction to sports engineering and Technology: Meaning of sports engineering, human motion, Detection and recording, human performance, assessment, Equipment and facility designing and sports related instrumentation and measurement.

Mechanics of engineering materials: Concepts of internal force, axial force, shear force, bending movement, torsion, energy method to find displacement of structure, strain energy. Biomechanics of daily and common activities, Gait, Posture, and Body levers, ergonomics.

Mechanical principles in movements such as lifting, walking, running, throwing, jumping, pulling, pushing etc.

UNIT-II 14 Hours

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

UNIT-III 16 Hours

Infrastructural Development: Sports infrastructure, gymnasium, pavilion, swimming pool, indoor stadium, out-door stadium, play park, academic block, administrative block, research block, library, sports hostels, etc.

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). 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

15 Hours

Maintenance and Facility life cycle costing: 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, Eco-friendly outer surrounding. Maintenance staff, financial consideration.

Building process: Design phase (including brief documentation), construction phase functional (occupational) life, re-evaluation, 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-V)	L	T	P	Cr
Course Code: MPD3507	3	1	0	4

Total Hours: 60

Course Learning Outcomes: After completing this course, the learner will be able to:

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. Physiological effect of human movement.

Course Content

UNIT-I

16 Hours

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

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

UNIT-II

15 Hours

Aerobic Exercise:

Cardio respiratory endurance training: Proper movement forms, i.e., correct stride, arm movements.

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

UNIT-III**15 Hours****Anaerobic Exercise:**

Resistance training for muscular strength and endurance, principles of resistance training.

Safety techniques (spotting, proper body alignment, lifting techniques, spatial, awareness and proper breathing techniques).

Weight training principles and concepts, basic resistance exercises (including freehand exercise, free weight exercise, weight machines, exercise bands and tubing.

Medicine balls, fit balls) advanced techniques of weight training.

UNIT-IV**15 Hours****Flexibility Exercise:**

Flexibility training, relaxation techniques and core training.

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

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.,*

Course Name: Educational Technology in Physical Education (Discipline Elective-V)	L	T	P	Cr
Course Code: MPD3508	3	1	0	4

Total Hours: 60

Course Learning Outcomes: After completing this course, the learner will be able to:

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 15 Hours

Education Technology: Need, Nature and Scope, Effective teaching and Principles of teaching Teacher's responsibilities, Phases and levels of teaching, A review of methods of teaching employed in physical education

UNIT-II 16 Hours

Systems Approach to Physical Education and Communication: Systems approach to education and its Components, Goal setting, task analysis, content analysis.

Context analysis and evaluation strategies: Instructional strategies and media for Instruction. Effectiveness of communication in instructional system. Communication modes, barriers and process of communication.

Instructional Design: Concept, views, Process and stages of development of instructional design.

Overview of models of instructional design: Instructional design for competency-based teaching, models for development of self-learning material.

UNIT-III 15 Hours

Audio Visual Media in Physical Education: Audio-visual media-meaning, importance and various forms Audio/Radio: 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.

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

UNIT-IV

14 Hours

New Horizons of Educational Technology: Recent innovations in the area of ET interactive video: Hypertext, video-texts, optical fiber technology, laser disk, computer conferencing. etc. Procedure and organization of Tele conferencing/interactive video-experiences of institutions, schools and universities. Recent experiments in the third world countries and pointers for, India with Suggested Readings to Physical education. 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:

- *Amita Bhardwaj. (2003). New Media of Educational Planning. Sarup of Sons, New Delhi.*
- *Bhatia and Bhatia. (1959). The Principles and Methods of Teaching. Doaba House, New Delhi.*
- *Essentials of Educational Technology, Madan Lal, 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.*

Semester-IV

Course Name: Athletic Care and Rehabilitation	L	T	P	Cr
Course Code: MPD4550	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completing this course, the learner will be able to:

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** **14 Hours**

Corrective Physical Education: Definition and objectives of corrective physical education. Posture and body mechanics, standards of standing posture, value of good posture, draw backs and causes of bad posture.

Posture test: Examination of the spine

UNIT-II **15 Hours**

Postural deformities: Normal curve of the spine and its utility.

Deviations in posture: Kyphosis, lordosis, flat back, scoliosis, round shoulders, Knock-knee, Bowleg, Flat foot. Causes for deviations and treatment including exercises. Rehabilitation Exercises, Passive, active, assisted, resisted exercise for Rehabilitation. Stretching, PNF techniques and principles.

UNIT-III **16 Hours**

Massage: Brief history of massage, massage asana aid for relaxation, points to be considered in giving massage. Physiological, Chemical, Psychological effects of massage, indication contraindication of Massage, Classification of the manipulation used massage.

Specific uses in the human body: Stroking manipulation, effleurage pressure manipulation, Petri massage, Kneading. Ironing.

Skin Rolling: Percussion manipulation, tapotement, hacking, clapping, beating, pounding, slapping, cupping, poking, shaking manipulation, deep massage.

UNIT-IV**15 Hours**

Sports Injuries Care, Treatment and Support: Principles pertaining to the prevention of sports injuries, care and treatment of exposed and unexposed injuries in sports, Principles of apply cold and heat, Infrared drays, ultrasonic therapy, Short wave diathermy therapy. 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:

- *Dohenty. J., Meno, Wetb. & Moder, D. (2000). Track & Field. Prentice Hall Inc., Englewood Cliffs.*
- *Lace, M.V. (1951). Massage and Medical Gymnastics. J & AChurchill Ltd, London.*
- *McOoy and Young. (1954). Tests and Measurement. Appleton Century, Naro, New York • C. L. (1967). Manual of Massage and, Movement. Febraand Febra Ltd, 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: Dissertation (RBS)	L	T	P	Cr
Course Code: MPD4551	0	0	0	12

Total Hours: 180

Course Learning Outcomes: After completing this course, the learner will be able to:

1. Develop a research plan for independent study within the field of physical education.
2. Familiarize themselves with various data collection methods applicable to physical education research.
3. Recognize and address challenges encounter during the research process
4. Acquire the ability to interpret research findings critically and draw appropriate conclusions.

Course Content

180 Hours

A candidate shall undertake a dissertation in the M.P.Ed. – IV Semester and must submit a synopsis for approval by the Head of the Department, based on the recommendation of the Departmental Research Committee (DRC).

The dissertation must be submitted no later than one week before the commencement of the IV semester examinations.

The candidate shall also appear for a Viva-Voce, conducted by the Departmental Research Committee (DRC).

Course Name: Service Learning	L	T	P	Cr
Course Code: MPD4552	0	0	4	2

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Participate in community activities to establish connections and build relationships.
2. Evaluate community needs through conversations with community members.
3. Develop and implement initiatives that address community needs.
4. Reflect on personal growth, community impact and ethical considerations related to service activities.

Course Content

This course aims to engross students in meaningful service-learning activities that foster community linking. Students will actively participate in community-based projects, collaborate with community members and organizations and reflect on the impact of their service activities. Through this experiential learning approach, students will develop a deep understanding of community needs, build relationships with diverse stakeholders and contribute to community development.

In this course, students are expected to be present in the community throughout the semester and reflect on their experiences regularly after working with them. The students will use experiential learning for providing service learning. They will be able to analyse and have understanding of the key theoretical, methodological and applied issues.

Select 10 community related activities which are to be performed in nearby villages. Students in groups of 8-10 shall work on one activity.

Evaluation Criteria

1. Every activity shall be evaluated on the same day out of 10 marks.
2. Total 10 activities out of 100 shall be evaluated and submitted to Examination branch.

Activity Evaluation

1. Type of activity- 2 marks
2. Participation of student- 2 marks
3. Engagement in the activity- 2 marks
4. Outcome of the activities- 2 marks
5. Attendance-2 marks

Transaction Mode:

Problem-solving learning, Blended learning, Gamification, Cooperative learning, Inquiry-based learning, Visualization, Group discussion, Experiential learning, Active participation.

Course Name: Internship (04Week)	L	T	P	Cr
Course Code: MPD4553	0	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Apply classroom knowledge to real-world physical education and sports settings.
2. Demonstrate effective coaching and teaching skills in various activities.
3. Organize and manage sports events and fitness programs efficiently.
4. Communicate professionally with students, athletes, and staff.

Course content

Total Lessons: A minimum of 30 lessons.

- 20 lessons to be conducted in schools.
- 10 lessons to be conducted within the college/institution/department.

Internship includes a minimum of 30 teaching lessons: 20 in schools and 10 teaching lessons in the college. It involves classroom teaching, practical sports coaching and community engagement. Students observe, plan and deliver lessons under supervision, with continuous assessment and reflection. Institutions must partner with recognized schools for practice teaching.

Course Name: Value and Environmental Education (Discipline Elective-VI)	L	T	P	Cr
Course Code: MPD4554	3	1	0	30

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

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 14Hours

Introduction to Value Education:

Values: Meaning, definition, concepts of values. Value education: Need, importance and objectives.

Moral values: Need and theories of values. Classification of values: Basic values of religion, classification of values. Value Systems: Meaning and definition, personal and communal values, consistency, internally consistent, internally inconsistent. Meaning of Environmental Education for Sustainable Development (EESD). Judging value system, commitment, commitment to values.

UNIT-II 15 Hours

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

UNIT-III 16 Hours

Rural Sanitation and Urban Health: Rural health problems, 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, services on urban slum area. Sanitation at fairs & festivals, mass

education.

UNIT-IV

15 Hours

Natural Resources and related environmental issues: Water resources, food resources and land resources, definition, effects and control. Measures of- Air pollution, water pollution, soil pollution, noise pollution, thermal pollution. Management of environment and Govt. policies, role of pollution control board.

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: Health Education and Sports Nutrition (Discipline Elective-IV)	L	T	P	Cr
Course Code: MPD4555	3	1	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

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

Course Content

UNIT-I 15 Hours

Health Education: Meaning, Scope, Objectives and Spectrum, Principles and Importance of health education, Planning and evaluation in health education programmers.

Pollution: Definition, effects and control measures of Air pollution, Water pollution, Noise pollution and Radiation. Natural hazards and their mitigation.

UNIT-II 14Hours

Health Problems in India: Communicable and non-communicable diseases, obesity, malnutrition, adulteration in food, environmental sanitation, explosive, population. Personal and environmental hygiene for schools, objective of school health service, role of health education in schools.

Health services care of skin, nails, eye health service, nutritional service, health appraisal, health record, Healthful school environment, first-aid and emergency care etc.

UNIT-III 16 Hours

Health Hazards, Stress and Injury Management: Hazards of substance abuse, smoking, alcohol & tobacco, Valuable use of leisure time.

Emphasis on proper rest, sleep and dreams. Healthy Living and positive lifestyle.

Wellness of mind, body and soul.

Stress: meaning, causes and management.

UNIT-IV

15 Hours

Introduction to Sports Nutrition: Meaning and definition of sports nutrition, role of nutrition in sports, basic nutrition guidelines. Nutrients: Ingestion to energy metabolism (Carbohydrate, Protein and Fat).

Role of carbohydrates, Fat and protein during exercise.

Nutrition and Weight Management: Concept of BMI (Body mass index), obesity and its hazard, diet inverses exercise for weight control maintaining a Healthy Lifestyle. Weight management program for sporty child, Role of diet and exercise in weight management. Design diet plan and exercise schedule for weight gain and loss.

Transaction Mode:

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

Suggested Readings:

- 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, the Gale Group, 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. Thoron's.