

Central University of Punjab



Course Structure and Syllabus

MPES (Master of Physical Education & Sports)

Session: 2021-23

**Department of Physical Education
School of Education**

Graduate Attributes for MPES (Master of Physical Education & Sports) Programme

Graduate Attributes reflects what students are expected to achieve after the completion of programme. Master of Physical Education & Sports programme graduates are likely to have the following attributes:

- Capability to apply analytic thought and evaluate empirical evidence through research and inquiry related to physical education & sport.
- Ability to create new domain of knowledge with understanding and able to demonstrate appropriate levels of professional knowledge, practice and engagement.
- Develop proficiency in verbal, visual and written skills to present complex information in a clear & concise manner to professionals of physical education.
- Develop the competence to positively influence, inspire and motivate others to manage conflict and building strong rapport with others to obtain commitment to a shared vision as a part of team or group.
- Ability to create, provide sports environment for society and inspire people for attaining high level of fitness & wellness.
- Developing research and field laboratory ethics in physical education & sport for honest reporting of the results of experimental and descriptive observations.
- Develop the entrepreneurship skills for personal effectiveness and achieve goals in field of physical education and sport.
- Develop strong interpersonal skills including respect, empathy and perspectives for professional teaching, training and coaching environment related to physical education, exercise and sports.

**Course Structure
SEMESTER -I**

Course Code	Course Title	Course Type	Credit			
			L	T	P	Total Credits per Week
MPS 506	Physiology of Exercise	Core course	3	0	0	3
MPS507	Physiology of Exercise (Practical)	Skill based	0	0	2	1
MPS 508	Research Methodology in Physical Education	Compulsory Foundation	3	0	0	3
MPS 522	Sports Biomechanics & Kinesiology	Core course	3	0	0	3
MPS 523	Sports Biomechanics & Kinesiology (Practical)	Skill Based	0	0	2	1
Discipline Elective (DE) (Select one of the following)						
MPS 510	Sports Technology	Discipline Elective	3	0	0	3
MPS 511	Adapted Physical Education					
MPS 552	Yogic Sciences					
Field Practical						
MPS 512	Practical-I Swimming & Gymnastic	Compulsory Foundation	0	0	4	2
MPS 513	Practical- II (Select Any two other than Specialization) a. Basketball b. Cricket c. Football d. Handball e. Hockey f. Kabaddi g. Kho-Kho h. Volleyball	Elective Foundation	0	0	4	2
MPS 514	Practical-III Aerobics & Yoga	Skill Based	0	0	2	1
Skill Based Practice						
MPS 515	Intramural Activities	Skill Based	0	0	2	1
Inter-disciplinary Courses (for the students of Department of Physical Education)						
XXX	An Interdisciplinary Course from other disciplines	IDC	2	0	0	2
Total			14	0	16	22
Inter-disciplinary Course (for other Departments)						
MPS 516	Health and Fitness Management	IDC	2	0	0	2

SEMESTER –II

Course Code	Course Title	Course Type	Credit			
			L	T	P	Total Credits per Week
MPS 521	Applied Statistics in Physical Education	Compulsory foundation	3	0	0	3
MPS 533	Applied Statistics in Physical Education(Practical)	Skill Based	0	0	2	1
MPS 551	Science of Sports Training	Core course	3	0	0	3
MPS 524	Measurement and Evaluation in Physical Education	Compulsory Foundation	3	0	0	3
MPS 525	Measurement and Evaluation in Physical Education (Practical)	Skill based	0	0	2	1
Discipline Elective (DE) (Select one of the following)						
MPS 556	Sports Journalism and Mass Media	Discipline Elective	3	0	0	3
MPS 534	Sports Management and Curriculum Designs in Physical Education & Sports					
MPS 509	Information & Communication Technology (ICT) in Physical Education					
Field Practical						
MPS 528	Practical –IV Running Events (Short, Long Events & steeplechase)	Compulsory Foundation	0	0	4	2
MPS 529	Practical-V (Select Any Two other than Specialization) a. Badminton b. Judo c. Table Tennis d. Tennis e. Weight training f. Wrestling	Elective Foundation	0	0	4	2
MPS 530	Practical-VI Indigenous Activities and Camping	Skill Based	0	0	2	1
Skill Based Practice						
MPS 531	Intramural Activities	Skill Based	0	0	2	1
Value Added Course (for the students of Department of Physical Education)						
XXX	Value Added Course	VAC	2	0	0	2
Total			14	0	16	22
Value Added Course (for other Departments)						
MPS 532	Yoga and Well Being	VAC	2	0	0	2

SEMESTER –III

Course Code	Course Title	Course Type	Credit Hours			
			L	T	P	Total Credits per Week
MPS 572	Sports Psychology	Core course	3	0	0	3
MPS 573	Sports Psychology (Practical)	Skill Based	0	0	2	1
MPS 527	Health Education and Sports Nutrition	Core course	3	0	0	3
MPS 553	Sports Medicine, Athletes care and Rehabilitation	Core course	3	0	0	3
MPS 554	Sports Medicine, Athletes care and Rehabilitation (Practical)	Skill Based	0	0	2	1
MPS 574	Comprehensive View of Physical Education	Discipline Enrichment course (DEC) / Compulsory Foundation	2	0	0	2
MPS 600	Research Proposal	Skill Based	0	0	8	4
Discipline Elective (DE) (Select one of following)						
MPS 563	Physical Fitness and Wellness	Discipline Elective	3	0	0	3
MPS 526	Value and Environmental Education					
MPS 564	Entrepreneurship in Physical Education					
Field Practical						
MPS 558	Practical –VII Jumping Events (Long Jump, Triple Jump, High Jump)	Compulsory Foundation	0	0	4	2
MPS 565	Sports Specialization -I <ul style="list-style-type: none"> • Minimum 05 students are compulsory for Sports Specialization. • Same Sports Specialization will be in 4th Semester • Select only One of the Following. Badminton, Basketball, Cricket, Football, Handball, Hockey, Judo, Kabaddi, Table Tennis, Tennis, Volleyball, Weight Lifting, Yoga	Elective Foundation	0	0	6	3
MPS 566	Teaching Proficiency in Physical Education	Skill Based	0	0	2	1
Skill Based Practice						
MPS 561	Intramural Activities	Skill Based	0	0	2	1
Total			14		26	27

SEMESTER –IV

Course Code	Course Title	Course Type	Credit Hours			
			L	T	P	Total Credits per Week
MPS 600	Dissertation	Skill Based	0	0	32	16
MPS 591	Internship	Skill Based	0	0	8	4
Field Practical						
MPS 580	Practical –VIII Throwing Events in Track & Field (Shot Put, Discuss, Javelin & Hammer)	Compulsory Foundation	0	0	4	2
MPS 581	Sports Specialization-II • Minimum 05 students are compulsory for Sports Specialization. • Select only One of the Following. Badminton, Basketball, Cricket, Football, Handball, Hockey, Judo, Kabaddi, Table Tennis, Tennis, Volleyball, Weight Lifting, Yoga	Elective Foundation	0	0	6	3
MPS 582	Coaching Proficiency in Physical Education & Sports (As per their Sports Specialization)	Skill Based	0	0	2	1
Skill Based Practice						
MPS 579	Intramural Activities	Skill Based	0	0	2	1
Total			0	0	54	27
Total Credits for All Semesters			98			

Note:

➤ **L:** Lectures **T:** Tutorial **P:** Practical **Cr:** Credits

SCHEME OF EXAMINATION

Subject Evaluation:

	Core, Discipline Elective, Compulsory Foundation, Value Added and Interdisciplinary Courses		Discipline Enrichment Course		Entrepreneurship Course	
	Marks	Evaluation Methods	Marks	Evaluation Methods	Marks	Evaluation Methods
Internal Assessment	25	Various (Department will decide)	-	-	-	-
Mid-semester test (MST)	25	Subjective	50	Objective	25	Objective
End-semester test (EST)	50	Subjective (70%) Objective (30%)	50	Objective	25	Subjective

Note:

1. The **objective type evaluation** will include one-word answers, fill-in-the-blank, sentence completion, true/false, MCQs', matching, analogies, rating and checklists. **The number of questions and weightage to each question will decide by the department only.**
2. The **subjective type evaluation** will include a very short answer (1-2 lines), a short answer (one paragraph), essay type with the restricted response, and an extended response. **The number of questions and weightage to each question will decide by the department only.**
3. **Internal Assessment Methods:** Surprise Tests, in-depth interview, unstructured interview, Jigsaw method, Think-Pair-Share, Students Teams Achievement Division (STAD), Rubrics, portfolios, case-based evaluation, video-based evaluation, Kahoot, Padlet, Directed paraphrasing, Approximate analogies, one-sentence summary, Pros and cons grid, student-generated questions, case analysis, simulated problem solving, media assisted evaluation, Application cards, Minute paper, open book techniques, classroom assignments, home assignments, term paper.

SEMESTER-I

Course Code: MPS 506
Course Title: Physiology of Exercise

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course, the students shall be able to;

- Comprehend the role, meaning and definition of Exercise Physiology in Physical Education and Sports.
- Outline ongoing knowledge about research in the field of Exercise Physiology.
- Explain the Muscles-types, functions and, characteristics.
- Reflect the effect of exercise on various systems.
- Develop insight in Bio-chemical aspects of exercise.
- Analyze the relation between Metabolism and Energy Transfer.
- Comprehend the Diet before, during & after the athletic performance.
- Explain Ergogenic aids and Doping in Sports.

UNIT-I

10 hours

1. **Cell:** Introduction, Structure of the Cell, Structure and functions of the Cell Components (Cell Wall, Cell Membrane, Cytoplasm, Nucleus and Cell Organelles), Types of Cells, Impact of Exercise on work at cellular level.
2. **Homeostasis:** Introduction, Components of Homeostatic System, Mechanism of Homeostasis in Different Systems (Core Temperature, Blood Glucose, Level of Blood Gases, Blood Oxygen Content, Arterial Blood Pressure, Fluid Balance, Blood pH Level, Energy Balance etc.), Negative and Positive Feedback. Peer review of general physiology.

UNIT-II

15 hours

1. **Energy System:** Introduction, Kinetic and Potential Energy, Exergonic and Endergonic Reactions, Metabolism (Catabolic and Anabolic Reactions), Phosphate-Bond Energy (ATP, ADP and CP), Cellular Respiration (Glycolysis, Krebs's Cycle, Electron Transport

Chain, Energy Transfer during Exercise (Phosphagen-ATP/CP System, Anaerobic Glycolysis, Aerobic Glycolysis), Energy Expenditure during Rest and Activity.

2. **Muscular System:** Introduction, Macro and Micro Structure of the Skeletal Muscle, Neuromuscular Junction, Muscle Contraction (Sliding Filament Theory), Changes during Muscular Contraction {Electrical Changes (Action Potential and Resting Potential), Thermal Changes (Resting Heat, Initial Heat, Recovery Heat)}, Types of Muscle Fibers, Muscle Tone, Effect of Exercise and Training on Muscular System. Reflection upon significance and working of energy and muscular systems.

UNIT - III

10 hours

1. **Nervous System:** Introduction, Types of Nervous System (CNS and PNS), Structure and Functions of CNS and PNS, Neuron, Structure of Neuron, Classification of Neuron, Properties of Nerve Fibers (Excitability, Conductivity, Refractory Period, Summation, Adaptation, Infatigability and All-or-None Law).
2. **Endocrine System:** Introduction, Types of Glands (Endocrine and Exocrine Glands), Location and Functions of different Glands (Hormones) Reflection upon significance and working of nervous and endocrine systems.

UNIT - IV

10 hours

1. **Ergogenic Aids:** Introduction, Types of Ergogenic Aid (Pharmacological Agent, Mechanical Agent, Psychological Agent, Physiological Agent and Nutritional Agent), Effect of Ergogenic Aids on Sports Performance.
2. **Nutrition and Athletic Performance:** Pre, During and Post Workout Meals and Fluid Intake.
3. **Exercise and Aging:** Physiological Changes, Training Adaptation according to Age, Different Exercises protocols for different age people.
4. **Exercise and Gender:** Physiological Gender Differences, Training Adaptation according to Gender, Different Exercises protocols for different Gender. Reflection upon Ergogenic Aids, Nutrition, Exercise & Aging and Gender,

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Readings:

1. Brown, R. G.(2015). Fundamentals of Exercise Physiology. Friends Publication.
2. Chandi, C. C. (2018). Human Physiology (Vol. 12). CBS Publishers.
3. Fox Stuart Ira (2016). Human Physiology (15th Edition). McGraw-Hill Education.
4. Porcari, J., Bryant, C., & Comana, F. (2015). Exercise Physiology. FA Davis.
5. Varshney & Mona Bedi (2018). Ghai's Textbook of Practical Physiology. Jaypee Brothers Medical Publishers.
6. William D. McArdle (2014). Exercise Physiology: Nutrition, Energy, And Human Performance (8th Edition). Lippincott Williams and Wilkins

Course Code: MPS 507

Course Title: Physiology of Exercise (Practical)

L	T	P	Cr
0	0	2	1

Total Hours: 30

Learning Outcomes

On the completion of the course the students shall be able to;

- Examine the characteristics of various Body composition analysis test
- Learn different methods for calculating heart rate.
- Develop insight into various methods of somatotype
- Develop skills for the administration and interpretation of physiology tools
- Develop understanding in the hormonal testing experiment

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PRACTICALS

1. Measurement of heart rate and Estimation of Target Heart Rate
2. Body composition analysis with various methods
3. Measurement of VO₂ Max (Field and Laboratory Method)
4. Blood Pressure measurement (Sphygmomanometer)
5. Anthropometric measurements
6. Measurement of various lung volumes through spirometer, peak flow meter.
7. Hormonal testing

Criteria of Continuous Assessment (Total Marks: 50)

- Practical Record :10 Marks
- Administration of tool/instrument and interpretation of result-20 marks
- Conducting experiments -20 marks

Criteria of Term End Assessment (Total Marks: 50)

- Conduct of one experiment/ Administration of tool/instrument and Analysis of its result: 30 Marks
- Preparing Record of all Practicals: 10 Marks
- Viva Voce: 10 Marks

Course Code: MPS 508

Course Title: Research Methodology in Physical Education

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the Meaning, Nature and scope of Research in physical education.
- Demonstrate the knowledge of research approaches in physical education.
- Classify and formulate the different Types and methods of Research.
- To gain insights about the Review of Literature and Formulation of Hypotheses.
- Choose the correct procedure for sample selection and techniques of Data Collection.
- Prepare the research proposals and develop Skills for thesis writing.

UNIT I

10 hours

1. Meaning and Definition of Research – Need, Nature and Scope of research in Physical Education
2. Scientific and Unscientific method of Problem Solving
3. Review of Related Literature
4. Identification of Research Problem
5. Criteria for selecting research problem
6. Characteristics of a good research and good researcher
7. Classification of Research. Peer discussion and practices of literature survey and review

UNIT II

15 hours

1. Formulation and Classification of Research Hypothesis
2. Limitations and Delimitations
3. Rationale and Significance of the Study.
4. Primary and Secondary Sources of Data
5. Analytical Research
 - i. Philosophical Research

6. Descriptive Research
 - i. Survey Research
 - ii. Tools of Survey Research
7. Case Study
8. Experimental Research and Design. Peer discussion and writing of hypothesis and rationale of study.

UNIT III

10hours

1. Types of Sampling Techniques
 - i. Probability Sampling Techniques
 - ii. Non-Probability Sampling Techniques
2. Questionnaire Construction and Development
3. Tools of data collection-I : Scale- meaning and types, test-meaning and types, inventories- meaning and types, questionnaire-meaning and types.
4. Tools of data collection-II : Observation- meaning and types, schedule and check-list. Peer discussion and use of tools in research

UNIT IV

10 hours

1. The Proposal Process (Introduction, Review of Related literature, methods and bibliography)
2. Writing of Thesis (Introduction, Reviewing Related literature, Methodology, Results and Discussion)
3. Preparation and uses of tables and figures
 - i. Writing Research Paper - Traditional Format & Journal Format
4. Format of Writing abstracts
5. Oral and poster presentation. Peer discussion, Paper Writing and Presentation

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Readings:

1. Ahlawat, R. P. (2016). Research Process in Physical Education& Sports Sciences. Friends Publication.
2. Flick, U. (2017). Introducing Research Methodology. Sage Publications.
3. Flick, U. (2019). An Introduction to Qualitative Research. Sage Publications.
4. Kahn, J. V. (2016). Research in Education (Vol. 10). Pearson Education Inc.
5. Kamlesh, D. M. (2019). Methodology of Research in Physical Education and Sports. Sports Publication.
6. Kothari, C. (2019). Research Methodology: Methods and Techniques. New Age International Publishers.
7. Mishra, P. D. (2018). Research and Statistics in Physical Education. Sports Publication.
8. Thomas, J. R. (2016). Research Method in Physical Activity. US: Human Kinetics.

Course Code: MPS 522

Course Title: Sports Biomechanics and Kinesiology

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to.

- Comprehend the importance of applied kinesiology and Sports Biomechanics.

- Scrutinize the action of muscles.
- Understand different types of motion, force, and their application in sports.
- Summarize the Methods of Analysis of Human Movements

UNIT I – Introduction

10 hours

1. Meaning, nature, role and scope of Applied kinesiology and Sports Biomechanics.
2. Meaning of Axis, Planes, Plane of the body and axis of motion
3. Dynamics, Kinematics, Kinetics, Static
4. Centre of gravity & Line of gravity.
5. Vector - Head to tail method and Parallelogram Method.
6. Meaning and definition of Motion. Types of Motion: Linear motion, angular motion, circular motion, uniform motion.
7. Principals related to Newton's Law. A complete understanding of basics of applied kinesiology and Sports Biomechanics.

UNIT II – Muscle Action and force

15 hours

1. Origin, Insertion, and action of muscles:
 - a. **Upper Extremities:** Pectoralis major and minor.
Deltoid, Biceps, Triceps (Anterior and Posterior).
Trapezius, Serratus, Rectus Abdominis.
 - b. **Lower Extremities:** Sartorius, Quadriceps, Hamstring, and Gastrocnemius.
2. Muscle size and its force production
3. Relationship between force production and contraction velocity
4. Relationship between force production and fibre type
5. Meaning and definition of force - Collinear Forces, Concurrent Forces, Parallel Forces
6. Sources of force -Force components.
7. Force applied at an angle Pressure -Friction -Buoyancy, Spin. Identification of the muscle action and the force where these can be applied.

UNIT III- Projectile and Lever

10 hours

1. Freely falling bodies
2. Projectiles -Equation of projectiles stability,
3. Factors influencing equilibrium - Guiding principles for stability -static and dynamic stability. Meaning of work, power, energy, kinetic energy, and potential energy.
4. Leverage -classes of lever - practical application.
5. Water resistance, Air resistance & Aerodynamics. Identification of the situations where these theories can be applied.

UNIT IV – Methods of Analysis of Human Movements

10 hours

1. Qualitative Analysis
 - I. Pre-Requisite Information
 - II. Basic Step
 - III. Observation Method
 - IV. Identification of Faults
 - V. Instructions
2. Quantitative Analysis
 - I. Creation of Model
 - II. Video Recording with accuracy
 - III. Vertex Digitization
 - IV. Draw Trajectory of Vertex

V. Stick Figure. Identification of Human movements with experimental procedure for the scientific Investigation.

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Readings:

1. Ackland, T. R., Elliott, B., & Bloomfield, J. (2009). Applied Anatomy and Biomechanics in Sport. Human Kinetics.
2. Bartlett, R. (2014). Introduction to Sports Biomechanics: Analyzing Human Movement Patterns. Routledge.
3. Chapman, A. E. (2008). Biomechanical Analysis of Fundamental Human Movements. Human Kinetics. Knowledge Warehouse.
4. Kumar, P. (2019). Biomechanical Analysis of Forward Head Posture among Pondicherry University Research Scholars Based On the Laptop Working Hours: An Analytical Study. International Journal Of Emerging Technologies And Innovative Research, 6 (6), 463-466.
5. Kumar, P., & Singh, R. R. M. (2019). Biomechanical analysis of anisomelia among the young children's in Puducherry. Discrepancy (LLD), 330, 19.
6. Singh, R. R. M. (2019). Biomechanical Analysis of Footprint Measurement among School Boys: A Positive Approach to Posture. Journal of the Gujarat Research Society, 21(1), 167-169.
7. Uppal, A. K. (2018). Kinesiology and Biomechanics. Friends Publications.

Course Code: MPS 523

Course Title: Sports Biomechanics and Kinesiology (Practical)

L	T	P	Cr
0	0	2	1

Total Hours: 30

Learning Outcomes

On the completion of the course the students shall be able to;

- Examine the anatomical and fundamental position of standing, walking and running
- Learn different methods for calculating gravity
- Develop insight in mechanical analysis of various techniques
- Explain actions of major muscles of body
- Develop skills for the administration and interpretation of software of sports biomechanics
- Develop insight in analyze the kinetic and kinematic parameters

PRACTICALS

1. Determination of centre of Gravity, Centre of gravity, line of gravity
2. Anatomical standing position and fundamental standing position
3. Handling of various equipment's and software related to Sports Biomechanics.
4. Mechanical analysis of techniques skills of major sports/games
5. Action of muscles of upper extremities by palpations method
6. Action of Muscles of lower extremities by palpations method
7. Manual calculations of various kinetic and kinematic parameters – distance, displacement, speed, velocity, acceleration, momentum, force, mass, weight, resultant vector, pressure, work, power, energy etc.
8. Stick diagram (basic techniques; anatomical posture, walking, push up, sit ups etc.)
9. Goniometry – measurement of joint ROM / Elgon. A complete practical understanding of applied kinesiology and Sports Biomechanics.

Criteria of Continuous Assessment (Total Marks: 50)

- Practical Record :10 Marks
- Administration of tool/instrument and interpretation of result-20 marks
- Conducting experiments -20 marks

Criteria of Term End Assessment (Total Marks: 50)

- Conduct of one experiment/ Administration of tool/instrument and Analysis of its result: 30 Marks
- Preparing Record of all Practicals: 10 Marks
- Viva Voce: 10 Marks

Discipline Elective Subject**Course Code: MPS 510****Course Title: Sports Technology**

L	T	P	Cr
3	0	0	3

Total Hours: 45**Learning Outcomes**

On the completion of the course the students shall be able to;

- Comprehend about the sports technologies and their aspects in Physical Education.
- Summarize the Mechanics of engineering materials and concepts.
- Aware about Sports Infrastructure and Maintenance.
- Develop Basics Understanding of theoretical analysis of cost and price.

Unit I – Sports Technology**10 Hours**

1. Meaning, definition, purpose, advantages and applications of Sports Technology
2. General Principles and purpose of instrumentation in sports
3. Workflow of instrumentation and business aspects
4. Technological impacts on sports. Peer discussion on sports technology and its impact on sports.

Unit II – Science of Sports Materials**10 Hours**

1. Adhesives- Nano glue, nanomoulding technology, Nano turf.
2. Foot wear production, Factors and application in sports, constraints.
3. Foams- Polyurethane, Polystyrene, Styrofoam, closed- cell and open-cell foams, Neoprene, Foam.
4. Smart Materials – Shape Memory Alloy (SMA), Thermo chromic film, High-density modelling foam. Peer design with smart materials in sports

Unit III – Surfaces of Playfields**10 Hours**

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

Unit IV – Modern Equipment**15 Hours**

1. Playing Equipments: Balls: Types, Materials and Advantages

2. Bat/Stick/ Racquets: Types, Materials and Advantages
3. Clothing and shoes: Types, Materials and Advantages.
4. Measuring equipments: Throwing and Jumping Events.
5. Protective equipments: Types, Materials and Advantages. Sports equipment with nano technology, Advantages. Reflexion of materials and advantages in playing with productive equipment in sports and games.

Practical:

- Students should be encouraged to design and manufacture improvised sports testing equipments in the laboratory/workshop and visit sports technology factory/sports goods manufacturers.

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Readings:

1. Charles J.A. Crane, F.A.A. & Furness, J.A.G. (1987). Selection of Engineering Materials. UK: Butterworth Heiremann.
2. Finn, R.A. & Trojan, P.K. (1999). Engineering Materials and their Applications. UK: Jaico Publisher.
3. John Mongilo. (2001). Nano Technology 101. New York: Green wood publishing group.
4. Walia, J.S. (1999). Principles and Methods of Education. (Paul Publishers, Jullandhar.
5. Kochar, S.K. (1982). Methods and Techniques of Teaching. (New Delhi, Jullandhar, Sterling Publishers Pvt. Ltd.).

Course Code: MPS 511

Course Title: Adapted Physical Education

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Comprehend the various aspects of Adapted Physical Education.
- Develop understanding on different types of disability.
- Summarize the special adapted programme for various types and categories of physical disability.
- Understand about different social welfare programs for disabled Manage Stress and Develop Resilience through Meditation.
- Understand about Classification of Disability.

Unit I

10 hours

1. Meaning & definitions, Aims and objectives of Adapted Physical Education
2. Need and importance of Adapted Physical Education
3. Role of physical education in adapted physical education,
4. Specific learning disabilities: Common types of learning disabilities their causes, treatment and intervention
5. Amputations & its types and dwarfism: types, causes, diagnosis and treatment. Reflexion of discussing types of disabilities, diagnosis and treatment intervention.

UNIT-II

15 hours

1. Guiding principles for adapted physical education programme (AAHPER principle)

2. Physical education programme for disabled of :Elementary school, Middle school, High school.
3. Class organization strategies: identifying the cause, embrace special needs, setting high expectations and goals.
4. Managing individual programmes: specially designed instructions, programme modifications, classroom accommodations, supplementary aids and services, transportation.
5. Special adapted programme for various types and categories of physical disability. Reflexion of design managing special need peoples and activities.

UNIT-III

10 hours

1. History of Paralympics.
2. Paralympics events: list of IPC summer and winter sports.
3. Aquatic activity programme for disabled
4. Nature of aquatic activity programme based on types of various disability
5. Rehabilitative role and importance of aquatic activity. Reflexion of discussing various sports competition to special need populations.

UNIT-IV

10hours

1. Aims and objectives of rehabilitation.
2. Meaning of functional and occupational rehabilitation
3. Importance of adapted programme in rehabilitation
4. Psychological rehabilitation- adjustment, environmental and personality development.
5. Provisions of special rights and privilege for disabled through legislations
6. Social welfare and awareness programmes for disabled personalities. Reflexion on discussing Social welfare and awareness programmes to special need peoples.

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Readings:

1. Auxter, H. (2001). Adapted Physical Education and Reactions. Morbey- St: Louis Mirrauri.
2. Auxter, D., & Pyfer, J. (1989). Principles and Methods of Adapted Physical Education and Recreation. Times Mirror Magazine.
3. Clarke, H. H., & Clarke, D. H. (1978). Developmental and Adapted Physical Education.
4. Kasser, Susan (2013). Inclusive Physical Activity (2nd Edition). Knowledge Warehouse Khel.
5. Kumar, P., Singh, R. M., & Ratnakar, A. (2018). Role of physical education research activities and their impact in modern day life. Asian Journal of Multidimensional Research.
6. Sahitya Kendra (2017). A Text Book of Adapted Physical Education & Sports.
7. Sharma, S.R (2019). Adapted Physical Education, Friends Publication.
8. Thind, M. N. (2010). Special Olympics Bharat Trainer Manuel. Special Olympics Bharat.
9. Winnick, J., & Porretta, D. L. (2016). Adapted Physical Education and Sport (Ed. 15). Human Kinetics.

Course Code- MPS 552

Course Title- Yogic Sciences

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Comprehend the concept of Yogic Practices and Meditation

- Perform Yogic practices with proficiency
- Manage Stress and Develop Resilience through Meditation
- Outline ongoing knowledge about research in the field of yoga

Unit I		10 hours
	<ol style="list-style-type: none"> 1. Meaning, Definitions & Historical background of Yoga 2. Aims & Objectives of Yoga Education 3. Application & Misconception about Yoga in Modern Society 4. Introduction to Patanjali Yoga Sutra Peer review and design of fitness module. Peer review of ancient and modern yogic practices. 	
UNIT-II		10 hours
	<ol style="list-style-type: none"> 1. Introduction to different schools of Yoga 2. Concept of Pancha Mahabhuta, Panch Kosh, Panch Prana Concept of Chakras and Aura in Yoga 3. Philosophy of the sacred syllable “Om” (AUM) 4. Concept of Triguna And Tridosha in Yoga. Peer discussion of spiritual and body elements in yoga. 	
UNIT-III		15hours
	<ol style="list-style-type: none"> 1. Shatkarma – Meaning, Types (Dhauti, Basti, Neti, Trataka& Kapalbhathi) techniques, Precautions and Benefits. 2. Asanas - Meaning, Definitions, Types, Techniques, Precautions and benefits. 3. Pranayama-Meaning, Definitions, Types, Techniques, Precautions and benefits. 4. Mudras &Bandas – Meaning, Technique, Precautions and Benefits. Reflection upon yogic practices for sacred and corporal fitness. 	
UNIT-IV		10 hours
	<ol style="list-style-type: none"> 1. Meditation: Meaning, techniques and benefits of meditation. 2. Mental relaxation through Prayer – A cross-cultural approach to mental health. 3. Role of Yoga in Psychological Preparation of athletes 4. Yogic practices for the common health problems: Constipation, Diabetes, Cervical, Arthritis, Backache, Sciatica Pain, Indigestion, Snoring, Eye disorders and Migraine. Peer discussion of yogic techniques to achieve a mentally clear & emotionally calm stable state and yogic practices for the treatment of common ailments. 	

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Reading:

1. Anatharaman, T.N., (1996). Ancient Yoga and Modern Science. Project of History of Indian Sciences Philosophy & Culture.
2. Arya, K. (2011). Yogic Science. Friends Publication.
3. Arya, K. (2013). Yogic Education. Friends Publication.
4. Debnath, K. K. (2010). Yogic Sciences. Friends Publication.
5. Horovitz, E. G., & Elgelid, S. (2015). Yoga Therapy: Theory and Practice. Routledge.
6. Kotecha., & Vaidya Rajesh. (2016). A Beginner’s Guide to Ayurveda. Chakrapani Publications.
7. Kumar., & Dr. Kamakhya, (2008). Super Science of Yoga. Standard Publications.
8. Leslie Kamin off & Amy Matthews (2011). Yoga Anatomy. Human Kinetics.
9. Nathial, M. S. (2013). Yogic Education. Friends Publication.
10. Niranjanananda Saraswati, Swami (2012). Gherenda Samhita.
11. Pramod Kumar Sethi (2017). Yoga and Skin Diseases. Sports Publication.
12. Saini, N. (2011). Yogic and Stress Management. Friends Publication.

13. Swami Vivekananda, (2019). The Complete Book of Yoga : Karma Yoga, Bhakti Yoga, Raja Yoga, Jnana Yoga. Fingerprint! Publishing.
14. Tarak Nath Pramanik (2018). Yoga Education. Sports Publication.

Interdisciplinary Course - IDC

L	T	P	Cr
2	0	0	2

Course Code: MPS 516

Course Title: Health and Fitness Management

Total Hours: 30

Learning Outcomes

On the completion of the course the students shall be able to;

- Explain aim, objective and principles of Health Education
- Summarize the concept of Fitness and its management
- Design processes of understanding about nutrition requirement for good health
- Evaluate obesity hazard and weight management techniques.

Unit- I

8hours

1. Meaning and Definition of Health and Health Education
2. Principles of Health Education
3. Prominent health problem associated with inactivity. Reflection upon health education and health problems

UNIT- II

6 hours

1. Meaning and Definition of Fitness
2. Concept of Physical Fitness and its Components
3. Principles of Physical Fitness
4. Factor Affecting Physical Fitness. Reflection upon physical fitness module

UNIT- III

8 hours

1. Meaning and Definition of Nutrition.
2. Human Energy System
3. Daily calories intake & burning
4. Exercise and metabolism & burning calories. Reflection upon calorie expenditure

UNIT-IV

8 hours

1. Stress Assessment & its Management Techniques
2. Obesity and its hazard
3. Misconception of Spot reduction
4. Dieting versus exercise for weight control. Peer review and weight management module

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Readings:

1. Agrawal, M. (2016). Aerobics Fitness & Style. Friends Publications.
2. Corbin, C. (2011). Concepts of Physical Fitness. McGraw-Hill Higher Education.
3. Fahey D. Thomas (2005). Weight Training Basis, A Complete Guide for Men and Women. Mcgraw- Hill Companies.
4. Greenberg, J., Dintiman, G., & Myers Oakes, B. (2004). Physical Fitness and Wellness. Champaign, IL: Human Kinetics.
5. Hoeger, W., & Hoeger, S. (2013). Fitness & Wellness. Wadsworth, Cengage Learning.
6. Prabha, S. (2015). Basic Fitness Assessment. Friends Publications.

7. Rathee, S. (2017). Physical Fitness and Wellness. Friends Publications.
8. Robert Malt. (2001). 90-Day Fitness Plan. D.K. publishing, Inc. 95, Madison Avenue.
9. The National Association for Sport and Physical Education (1900). Concepts of Physical Education, What Every Student Needs to Know. Association Drive Reston.
10. Uppal, A.K. (2016). Physical Fitness and Wellness. Friends Publications.

Field Practical

Course Code: MPS 512

Course Title: Practical –I (Swimming and Gymnastics)

L	T	P	Cr
0	0	4	2

Total Hours: 60

Learning outcomes:

After completion of the course students will be able to

- Explain aim, objective, and principles of Swimming & Gymnastics.
- Recognize the importance of applied kinesiology and Sports Biomechanics in Swimming & Gymnastics.
- Analyse the action of the muscles involves in Swimming and Gymnastics.
- To enable the students for acquiring relevant skills in Swimming and Gymnastics
- Perform Swimming and Gymnastics with proficiency

Unit-I

15 hours

1. Introduction of Swimming & Historical Development with special reference to India.

- I. Fundamental Skills
- II. Entry in to the pool.
- III. Developing water balance and confidence.
- IV. Water fear removing drills.
 - a. Floating Mush room & Jelly fish, tuck float etc.
 - b. Gliding with and without kick board.

Unit-II

20 hours

- I. Teaching of competitive swimming strokes (any two)
- II. Body Position, Leg Kick, Arm Pull, Breathing and Co-ordination.
- III. Starts and turns of concerned strokes.
- IV. Health and hygiene rules.
- V. Safety Rules
- VI. Pool Specification

Unit-III

25 hours

(MEN SECTION)

1. Developmental Exercises common for Men and Women
 - I. Exercises on wall bars, exercises on heavy beam, rope climbing, exercises with medicine ball.
 - II. Pyramid formations and stunts.
2. Floor Exercises
 - I. Forward roll, backward roll, sideward roll, cart wheel, hand stand and forward roll, backward roll to hand stand.
 - II. Diving forward roll, side split, head stand, different kind of scale, dive roll from best board and round off.
3. Parallel Bars

- I. Mount from one bar, straddle walking on parallel bars, single and double step walk, perfect swing and shoulder stand on one bar roll forward, roll side, shoulder stand and front on back vault to the side (dismount).
4. Vaulting Table
 - I. Approach run and jump from the beat board, cat vault, squat vault and straddle vault.
5. Horizontal Bars
 - I. Perfect swing on horizontal bars, single leg up start with swing, mill circle forward, and mill circle backward.

Unit-IV

25 hours

(WOMEN SECTION)

1. Floor Exercise
 - I. Rolls-forward and backward, hand stand and roll forward, cartwheel and cat leap.
2. Uneven Bars
 - I. Long higher bar to squat forward to rear support, swan, one leg squat rise to scale and under wing dismount.
3. Beam
 - I. Jump to squat stand, knee scale with support, walk on the beam, standing scale front ways and cat leap.
4. Vaulting
 - I. Squat vault.

Suggested Readings:

1. Aneja Om Prakash. (2010). Swimming Skills & Rules. Khel Sahitya Kendra, New Delhi.
2. Jain, D. (2003). Swimming Skill & Rules. Khel Sahitya Kendra, New Delhi, 2003.
3. Dick Hannula. (2003). Coaching Swimming Successfully. (Second edition) Friends Publication, (India).
4. Kanika, K. (2005) Swimming Coaching Manual, Sports Publication, New Delhi.
5. Kelvin Juba, (2001). Swimming for fitness.
6. Chakraborty, S. (2006). Activities for children teaching gymnastics Pyramids. Sports Publication.
7. Carle, D.T. (1963). Hand book of progressive gymnastics. Englewood Cliffs: N.J.Printice Hall.
8. Drury, B. J., &Schmid, A. B. (1970). Gymnastics for women. California: National Book.
9. Lokon, N. C., &Wiliougby, R. J. (1954). Complete book of gymnastics.

Criteria of Continuous Assessment (Total Marks: 50)

- Attainment of Specific Fitness -10 marks
- Execution of Technique: 15Marks
- Demonstration of Skill :15 Marks
- Marking and Measurements -10 marks

Criteria of Term End Assessment (Total Marks: 50)

- Demonstration of Skills and Techniques: 20 Marks
- Coaching and Officiating: 10 Marks
- Preparing Record of Practicals: 10 Marks
- Viva Voce: 10 Marks

Course Code: MPS 513

Course Title: Practical- II (Basketball, Cricket, Football, Handball, Hockey, Kabaddi, Kho-Kho, Volleyball, – Select Any Two)

L	T	P	Cr
0	0	4	2

Total Hours: 60

Learning outcomes:

After completion of the course students will be able to

- Explain the rules & regulations of the game.
- Recognize the importance of applied kinesiology and Sports Biomechanics in various games.
- To develop mastery on training sessions
- To develop skill proficiency
- Actively participate in coaching aspects.
- To develop proficiency in Officiating & Conducting of the game.
- To develop critical understanding of application of strategies, tactics during teaching, coaching, competitions.

UNIT -I

10 hours

1. History of Games, Structure and functions of National & International controlling Bodies of particular game.
2. Fundamental skills and drills. Lead up Games.

UNIT -II

10 hours

1. Practical application of different Defensive and Offensive Techniques, Tactics patterns applicable to game.
2. Tactical Training-patterns applicable to game.

UNIT- III

10 hours

1. Philosophy of Coaching.
2. Coaching Schedule.
3. Coaching Campus.

UNIT- IV

15 hours

1. General and Specific warming – up routines. Specially preparing, basis and supplementary exercise.
2. Training means for development of different components of physical and motor fitness – Strength, Speed, Endurance, Flexibility coordinative abilities.

UNIT -V

15 hours

1. Psychology preparation of Sportsman/players.
2. Tests, Measurements and Evaluation.
 - I. Skills Tests.
 - II. Test for different fitness components.

Suggested Readings:

1. Allen Wade. (1967). Guide to Training and Coaching.
2. Arpad, C. (1972). Soccer: Technique, Tactics, Coaching. Corvina Press.
3. Bill Beswick. (2010). Focused for Soccer. 2nd Edition Human Kinetics.
4. Bobby Moffat. (1985). The Basic Soccer Guide. Collier Books.

5. Thomas Reilly & Mark Williams. (2003). Science and Soccer. Routledge London.
6. Reita Clanton & Mary P. D. (1996). Team Handball: Steps to Success: Steps to Success Sports. Human Kinetics Publishers.
7. Nikola Radic; Andraz Repar; Primoz Pori; Dusan Krizzman & Mitjallc. (2013). Handball: from beginner to top player. Self-publishing N. Radic Publisher.
8. Baha M. H and James D. L (1994). Team Handball: Skills, Strategies and Training. Eddie Bowers Publishing Company.
9. Bernath E. Phillips (2013). Fundamental Handball. Literary Licensing publisher.
10. Siddharth (2016). Kabaddi Introduction, Rules, Information, History & Competitions. Sportycious. Retrieved 28 January 2020.
11. Muniraju, S. (2015). A Text Book on Kabaddi: Kabaddi, Skills Techniques and Strategies. Lap Lambert Academic Publishing.
12. E. Prasad Rao (2002). Kabaddi the complete hand book. Jagadamba Publications, Vizianagaram.
13. Yogesh Yadav. (1969). Kho-Kho. Maharashtra Kho-Kho Association.
14. Sanjay Khalatkar. (2016). Kho-Kho Paperback. NachiketPrakashan; First Edition, 2016.

Criteria of Continuous Assessment (Total Marks: 50)

- Attainment of Specific Fitness -10 marks
- Execution of Technique: 15Marks
- Demonstration of Skill :15 Marks
- Marking and Measurements -10 marks

Criteria of Term End Assessment (Total Marks: 50)

- Demonstration of Skills and Techniques: 20 Marks
- Coaching and Officiating: 10 Marks
- Preparing Record of Practicals: 10 Marks
- Viva Voce: 10 Marks

Course Code: MPS 514

Course Title: Practical III (Aerobics & Yoga)

L	T	P	Cr
0	0	2	1

Total Hours: 30

Learning outcomes:

After completion of the course students will be able to

- Explain aim, objectives & principles of Aerobics & Yoga
- Practice Aerobics & Yoga
- To develop proficiency in Aerobics & Yoga.
- Classify the different types of motion and force and its application.
- Manage Stress and Develop Resilience through Meditation
- Develop understanding about the good health.

Unit I

15 hours

1. Rhythmic Aerobics – Music and Beat Counts, overthetop,
2. Low Impact Aerobics: Marching Basics (leg curl, toe touch, heel touch, in and out, side touch), Steps - single step touch, 'V' shape, 'A' shape, 'L' shape, 'Z' shape,

'Square'shape, doublesidetoside steptouch, grapevine,Dance (Mambo-Chacha, Twisting)

3. High Impact Aerobics:Step foot placement and Basics(toe touch&heel touch on step), 'V' shape,'A'shape, 'L'shape,doublesidetoside steptouch, grapevine,Turning on step, Dance (Mambo-Chacha, Twisting)

Unit- II

15 hours

1. Shatkarma – Meaning, Types (Dhauti, Basti, Neti, Tratak&Kapalbhati) techniques, Precautions and Benefits.
2. Surya Namaskar: Technique and benefits.
3. Asanas - Types, Techniques, sequencing, and benefits.
4. Pranayama- Types, Techniques and benefits.
5. Meditation: Meaning, techniques and benefits of meditation.

Suggested Readings:

1. Kenneth H. Cooper. (1970). The new aerobics. Bantam Books.
2. Anatharaman, T.N., (1996). Ancient Yoga and Modern Science. Project of History of Indian Sciences Philosophy & Culture.
3. Bhardwaj&Yogeshwar. (2004). Textbook of Yoga. Publisher: Penguin, India.
4. Jha&Gangadhar. (1894). Yoga Sara Samgraha. Bombay Theosophical Fund, TatvaVivechaka Press, Bombay.
5. Kumar &Kamakhyia. (2008). Super Science of Yoga. Standard Publications.
6. Sturgess& Stephen. (1996). The Yoga Book. Watkins Publications, London, University of Michigan, Lonavala.

Criteria of Continuous Assessment (Total Marks: 50)

- Attainment of Specific Fitness -10marks
- Execution of Technique: 20Marks
- Demonstration of Skill :20 Marks

Criteria of Term End Assessment (Total Marks: 50)

- Demonstration of Skills and Techniques: 20Marks
- Coaching and Officiating: 10 Marks
- Preparing Record of Practicals: 10Marks
- Viva Voce: 10Marks

Course Code: MPS 515

Course Title: Intramural Activities

L	T	P	Cr
0	0	2	1

Total Hours: 30

Learning outcomes:

After completion of the course students will be able to

- To develop proficiency in Sports & Games.
- To enable the students for acquiring relevant skills in various Sports & Games.
- To develop good judgment and fair play in competitions.
- To enhance teamwork, and leadership skills.
- To enhance a social interaction through play within a diverse student body.

Content

The students of MPES– I Semester need to participate in the intramural competition to nurture healthy competition, good judgment and fair play, teamwork, and leadership skills. The intramural competition allows students to participate in sport and physical activities without regard for high performance skill or ability and enhance social interaction through play within a diverse student body and reduce student conflict by encouraging students to manage their emotions appropriately. It will promote a lifestyle of healthy habits through recreation and leisure activity involvement.

Criteria of Continuous Assessment (Total Marks: 50)

- Quality of Conducting Sports Competition – 20
- Preparation of Playing Area – 20 Marks
- Officiating – 10 Marks

Criteria of Term End Assessment (Total Marks: 50)

- Marking of any two Team Game Sports other than specialization -20 Marks
- Marking of any two Individual Sports other than specialization - 20 Marks
- Officiating of any two sports other than specialization - 10 Marks

MPES– II SEMESTER

Course Code: MPS 521

Course Title: Applied Statistics in Physical Education

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning outcomes:

Learning Outcomes

On the completion of the course the students shall be able to;

- Comprehend the importance of statistics in the field of physical education
- Summarize the graphical representation of data.
- Differentiate between the application of parametric and non-parametric test
- Develop understanding about normal curve and divergence from normality.
- Analyze the different statistical techniques to different problems.

UNIT - I

08 hours

1. Meaning of Statistics and Importance of Statistics in Physical Education
2. Meaning of raw data, single score, grouped data and Discrete & continuous Variables
3. Type of statistical process – descriptive, inferential, comparative, relationship and predictive.
4. Parametric and Non parametric statistics, Four Levels of Data – Nominal, Ordinal, Interval & Ratio. Brain Storming and Problem Solving.

UNIT - II

12 hours

1. Application of Measures of Central tendency- Mean, Median and Mode
2. Application of Measures of Variability- Range, Quartile deviation, Mean deviation, Standard deviation and absolute & relative variability.
3. Meaning and Properties of Normal Curve and relationship of normal curve to binomial distribution.
4. Divergence from normality – Skewness and kurtosis.

5. Developing norms in the form of grading, Percentile Scale, T- Scale, Scales based on difficulty ratings. Brain Storming and Problem Solving.

UNIT-III

10 hours

1. Linear regression equation with two variables.
2. Partial correlation coefficients of first and second order. Multiple correlation coefficients involving three variables.
3. Sampling Distribution of Means, Standard Error of Mean, Interval estimates and Point estimates; Coefficients interval for mean.
4. Testing of Hypothesis : Region of Acceptance & Region of Rejection null & alternative Hypotheses: Level of Significance, type I & Type II errors, one tailed & two tailed Tests, degrees of freedom, procedure in testing of hypothesis. Brain Storming and Problem Solving.

UNIT-IV

15 hours

1. Large Sample test (z-test) for means for one sample and two samples; Small sample test (t-test) for means for one sample and two samples – dependent and independent samples, F-test and interpretation of results.
2. Chi- Square Test for goodness of fit and testing independence of attributes with interpretation of results
3. Mann Whitney U test – Assumptions and interpretation of results
4. One way Analysis of Variance, Post- hoc Tests – LSD & Scheffe with interpretation of results. Brain Storming and Problem Solving.

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Readings:

1. Bhunia, A. (2013). Statistical methods for practice and research (A guide to data analysis using SPSS). South Asian Journal of Management, 20(1), 154.
2. Cooke, D., & Clarke, G. M. (1989). A Basic Course in Statistics. Arnold.
3. De Muth, J. E. (2014). Basic Statistics and Pharmaceutical Statistical Applications. CRC Press.
4. Dhinu, M. R. (2017). Applied Statistics in Physical Education & Sports. Friends Publications.
5. Gaur A. S.,&Sanjaya S. (2009). Statistical Methods for Practice and Research: A Guide to Data Analysis Using SPSS. SAGE Publications Pvt Ltd.
6. Gupta, B. C., & Walker, H. F. (2005). Applied Statistics for the Six Sigma Green Belt. ASQ Press.
7. Kaur, S. (2017). Research & Statistics in Physical Education. Friends Publications.
8. Rajalakshmi, D. (2018). Advanced Statistics for Physical Education. Friends Publications.
9. Verma, J.P. (2011). Statistical Methods for Sports and Physical Education. Tata McGraw Hill Education.

Course Code: MPS 533

Course Title: Applied Statistics in Physical Education (Practical)

L	T	P	Cr
0	0	2	1

Total Hours: 30

Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the application of various statistical techniques

- Develop insight in application of data analysis software
- Learn interpretation of output of data analysis software
- Develop skills for presentation of data in tabular form
- Develop insight for graphical presentation of data

PRACTICALS

1. Calculation of partial correlation and multiple correlation.
2. Calculation of t- ratio for related and unrelated groups.
3. Calculation of Z- ratio for testing the hypothesis.
4. Preparing the Percentile Scale.
5. Calculation of Chi-Square.
6. Calculation of the One Way ANOVA with equal & unequal sample sizes.
7. Using SPSS, R (R Foundation for Statistical Computing), MATLAB, MINITAB, and STATA for data processing and analysis

Criteria of Continuous Assessment (Total Marks: 50)

- Practical Record :10 Marks
- Administration of tool/instrument and interpretation of result-20 marks
- Conducting experiments -20 marks

Criteria of Term End Assessment (Total Marks: 50)

- Conduct of one experiment/ Administration of tool/instrument and Analysis of its result: 30 Marks
- Preparing Record of all Practicals: 10 Marks
- Viva Voce: 10 Marks

Course Code: MPS 551

Course Title: Science of Sports Training

Learning Outcomes

L	T	P	Cr
3	0	0	3

Total Hours: 45

On the completion of the course the students shall be able to.

- Comprehend the concept of training and planning
- Summarize the mastery on training sessions
- Understand about the psychological factor affect sports performance.
- Understand preparation for competition.

UNIT-I

10 hours

1. Meaning and importance of training. Aim and Objectives of Sports, training Physical fitness components.
2. Sports training methods Plyometric training high attitude training.
3. Theory and practice of strength development. Maximum strength, Elastic strength, Strength endurance, absolute and relative strength.
4. Strength development training. A complete understanding and the basics of sports training methods.

UNIT- II

10hours

1. Theory and practice for the development of speed in Sports, speed development training, and speed barrier.

2. Theory and practice for the development of Sports. Continuous method, Alternating pace method, Fartlek Repetition – Interval training speed endurance training, strength endurance training.
3. Short term endurance, medium term endurance, Long term endurance, speed endurance and strength endurance. Theoretical development of the training methods.

UNIT-III

10 hours

1. Theory and practice for the development of mobility, variation of mobility-active, passive, and kinetic mobility.
2. Factors influencing mobility, role of mobility, mobility training.
3. Planning the programme, Periodisation- Phases of Periodisation, Types of Periodisation- single and double periodisation. Reflection upon the training methods.

UNIT-IV

15 hours

1. Loading, Adaptation to loading – intensity of loading. Density in loading. Duration of stimulus in loading, extent of loading and progressive loading.
2. Training Vs straining factors reducing performance,
3. Symptoms for overload, Means of recovery Diet, Sleep, Rest, Physical therapy, climate therapy.
4. Competition, Competition preparation, Sports talent identification – Process and Procedures. Scientific approach of training methods and its application in Sports.

Suggested Reading:

1. Bompa, T. O., & Buzzichelli, C. (2018). Periodization-: Theory and Methodology of Training. Human kinetics.
2. Bompa, T., Bompa, T. O., & Carrera, M. (2005). Periodization Training for Sports(Ed. 2). Human Kinetics.
3. Jesudoss,S. J. (2015). Principles of Sports Training. Friends Publications.
4. Kurz, T. (2001). Science of Sports Training: How to Plan and Control Training for Peak Performance. Stadion.
5. Loehr, J. E. (1995). PDF The New Toughness Training for Sports: Mental Emotional Physical Conditioning From One of the Worlds Premier Sports Psychologists Online Book.
6. OBE, F. W. D. (2014). Sports Training Principles: An Introduction to Sports Science. Bloomsbury Publishing.
7. Singh, H. (1984). Sports Training: General Theory & Methods. Netaji Subhas. Nat. Inst. of Sports.
8. Viru, A. (2017). Adaptation in Sports Training. Routledge.

Course Code: MPS 524

Course Title: Measurement and Evaluation in Physical Education

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the meaning and principles of Measurement and Evaluation.
- Understand the basic concepts and practices adopted in evaluation.
- Analyse the various tests used in Physical education.
- Understand Anthropometric and Aerobic-Anaerobic Tests.
- Reflect on the Concepts and Assessment of Physical Fitness.

- Explain various skill tests in Physical education.

UNIT- I

10 hours

1. Meaning of Test, Measurement and Evaluation.
2. Principles of Measurement and Evaluation.
3. Domains of Human Performance - cognitive, affective and psychomotor.
4. Meaning and establishing Validity, Reliability and Objectivity.
5. Norm referenced and Criterion referenced standards, **Reflexion upon test measurement and evaluation utilization.**

UNIT-II

10 hours

1. Criteria of test selection.
2. Factors Affecting Scientific Authenticity.
3. Procedure to Establish Scientific Authenticity.
4. Guidelines for constructing knowledge test.
5. Steps for construction of skill test / specific fitness test. Reflexion of understanding test and criteria construction.

UNIT-III

15 hours

1. Concepts and Assessment of Physical Fitness :
 - a. AAHPERD Health Related Fitness Test and Tuttle Pulse ratio test.
 - b. Roger's PFI
2. Motor Fitness:
 - a. Indiana Motor Fitness Test
 - b. Oregon Motor Fitness Test.
 - c. JCR Test
3. Motor Ability:
 - a. McCloy's General Motor Ability Test.
 - b. Barrow Motor Ability Test.
4. Motor Educability:
 - a. Methany Johnson Test.
 - b. Larson Test.
5. Skill Test
 - a. Badminton : French Short Serve and Clear Test.
 - b. Basketball : AAHPERD Basketball Test.
 - c. Hockey : Henry Fridel Hockey Skill Test.
 - d. Soccer : Warner Test for Soccer Skills.
 - e. Tennis : Miller Wall Valley Test.
 - f. Volleyball : Russell and Longe Test.

Reflexion of motor qualities and major games skill test assessment.

UNIT-IV

10 hours

1. Basic concept of Anthropometric Measurements
 - a. Height & Weight : standing & sitting height and body weight
 - b. Girth Measurement: upper arm, forearm, calf and chest.
 - c. Width Measurement: biacromial, chest, Illocrestol, Epicondyler (Femur & Humerous).
2. Assessment of Body Composition.
 - a. Skin Fold Caliper
 - b. Bioelectrical iMPSdance

- c. Hydrostatic weighing
- d. BMI and Waist Hip Ratio
- e. Ponderal index
- f. IOWA posture test

Reflexion about understand various body composition assessment and evaluation.

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Readings:

1. Alan C. Lacy & Skip M. Williams. (2018). Measurement and Evaluation in Physical Education and Exercise Science (Ed. 8). Routledge.
2. American College of Sports Medicine. (2013). ACSM's Health-Related Physical Fitness Assessment Manual. Lippincott Williams & Wilkins.
3. American College of Sports Medicine (2017). ACSM's Health-Related Physical Fitness Assessment Manual. Lippincott Williams & Wilkins.
4. Karad, P.L. (2017). Test, Measurement and Evaluation in Physical Education. Khel Sahitya Kendra.
5. Lacy, A. C., & Williams, S. M. (2018). Measurement and Evaluation in Physical Education and Exercise Science. Routledge.
6. Miller, D. (2019). Measurement by the Physical Educator Why and How (8th Edition). McGraw-Hill Higher Education.
7. Yobu, A. (2010). Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. Friends Publications.

Course Code: MPS 525

Course Title: Measurement and Evaluation in Physical Education (Practical)

L	T	P	Cr
0	0	2	1

Total Hours: 30

Learning Outcomes

On the completion of the course the students shall be able to;

- Learn different methods for testing cardio respiratory test
- Explain the various methods of Anthropometric measurement
- Develop insight in various methods of somatotyping
- Develop skills for the administration and interpretation of field tests

PRACTICALS

1. Assessment of endurance through-twelve minute run/walk test; six hundred yards run walk test; Harvard step test.
2. Assessment of resting physiological parameters- Heart rate, respiratory rate.
3. Anthropometric measurement
4. Somatotyping, somatocharts& indices
5. Basketball (Johnson basketball ability test)
6. Volleyball (Braddy volleyball test and Russel& lounge volleyball test)
7. Hockey (French hockey test, Friedal hockey test)
8. Football (mc Donald soccer test)
9. Badminton (Lockhart &McPhearson badminton skill)
Reflexion of conducting body composition and games skill test.

Criteria of Continuous Assessment (Total Marks: 50)

- Practical Record :10 Marks
- Administration of tool/instrument and interpretation of result-20 marks
- Conducting experiments -20 marks

Criteria of Term End Assessment (Total Marks: 50)

- Conduct of one experiment/ Administration of tool/instrument and Analysis of its result: 30 Marks
- Preparing Record of all Practicals: 10 Marks
- Viva Voce: 10 Marks

Discipline Specific Elective

Course Code: MPS 556

Course Title: Sports Journalism and Mass Media (Elective)

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Comprehend the Meaning and Definition of Journalism
- Summarize the evolution in Sports Journalism and Mass Media
- Practice the ethics in Sports Journalism
- Discuss the Concept of Sports Bulletin, Journalism and sports education
- Analyse the role of mass media on sports
- Prepare report on sports

UNIT-I

10 Hours

1. Sports Journalism: Meaning, Definition and Historical Background
2. National and International Sports News Agencies
3. Mode of Sport Journalism: Print, Electronic and Informal Media. Peer discussion of historical and contemporary Sport Journalism aspects.

UNIT-II

13Hours

1. News: Definition, basic news elements, organisation of sports news desk, Pitfalls in use of language, Proof Reading, Qualities and responsibilities of sports news reporters.
2. Organization of Pre & Post Sports Event Press Meet.
3. Coverage: Covering Local / National/ International sports competitions and writing of press release. Reflection upon setup and modalities of news transmission.

UNIT-III

12 Hours

1. Review Writing: Brief review of Olympic Games, Asian Games, Common Wealth Games World Cup, National Games and Indian Traditional Games.
2. Writing Sports Features: Types of sports features, sports personalities and their thumb nail sketches, Writing Sports Editorials, Blogs & Column.
3. Art of Commentating and interviewing: Commentating sports for radio and television channels and Interview with and elite Players and Coaches. Reflection upon various skills of sports journalism.

UNIT-IV

10 Hours

1. Amateuism v/s professionalism: Invasion of private life, emphasis on winning, sports for charity.
2. Role of Advertisement in Sports Journalism.

- Career in Sports Photography: Equipments, Editing and Publishing. Peer discussion on ethics of sports journalism and Career opportunities in sports journalism.

Practical:

- Handling of various equipments related to sports journalism
- Writing various types of reports, leads, headlines and news stories
- Conducting interviews and writing stories on it.
- Conducting and covering pre event and post event press meet.
- Writing and publishing Blogs.
- Record videos by using various camera movements and Angles
- Prepare a photo feature
- Experiment on various types of shots and angle.

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Reading:

- Dhananjay Joshi (2010). Value Education in Global Perspective. Lotus Press.
- Kathryn T. Stofer., & James R. Schaffer (2019). Sports Journalism: An Introduction to Reporting And Writing. Rowman & Little field Publishers.
- Koak, S & Sharma, R. (2015). Media and Career in Phy Edu. Friends Publications.
- Lal, R. (2013). Sports Journalism. Friends Publications.
- Malik, (2010). Sports Journalism and Mass Media. Friends Publications.
- Phil Andrews (2013). Sports Journalism (Ed. 2). SAGE Publications Ltd.

Course Code: MPS 534

Course Title: Sports Management and Curriculum Designs in Physical Education & Sports

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Comprehend the basic principles and importance of Sports management
- Analysis the guidelines for Purchase and Supplies of Equipment
- Explain the concept and bases of curriculum development
- Analyze the principles and different models of curriculum development
- Examine the processes involved in the curriculum development process
- Differentiate different types of curriculum designing and its application
- Develop skills to evaluate different types of curriculum

UNIT – I

8 Hours

- Management: Meaning, definition, scope, principles, functions of management: Planning, Organizing, Staffing, Directing, Controlling, Coordinating, Evaluating and innovating
- Personnel management- objectives and principles. Self-appraisal, communication skills and time management. Essential skills of administration.
- Roles of manager: Interpersonal roles, Informational roles, Decisional roles, Qualities of a manager. Reflection upon essential aspects and skills of Sports Management.

UNIT – II**12 Hours**

1. Facilities and Equipment management: Types of facility/infrastructure-indoor, outdoor, Purchase, Care and Maintenance
2. Tournament organization: Types of tournament-Knock out or Elimination, League or Round Robin, Combination, Consolation, Challenge Tournaments
3. Intramural Competitions: Meaning and Importance of Intramural, Objectives of Intramural, Conduct of Intramural
4. Process of organizing sports events, Notifications, Invitations, Selection of officials, Monitoring, Writing reports, maintaining records
5. Sport Law and Legal Liability: Meaning, concept, Application of Contract in Sports and Legal Liability in Physical Education and Sport. Reflection upon knowledge and prerequisite skills to organizing sports events.

UNIT – III**10Hours**

1. Concept and Principles of Curriculum, Strategies of Curriculum Development, Stages in the Process of Curriculum development
2. Principles for curriculum development: Activity centered, Community centered, forward looking principle, Principles of integration, Balance, Relevance, flexibility, Contextually and plurality
3. India's National Education Policy - 2020: Introduction and several major reforms in education through NEP. Opportunities and responsibilities in Sports and Physical Education after NEP.
4. Role of National level Statutory Bodies - UGC, NCTE and University in Curriculum Development
5. Choice Based Credit System and its implementation. Peer review of skills for curriculum development and education reforms in India.

UNIT – IV**15 Hours**

1. Types of Curriculum Designs- Subject centered, Learner centered, Experience centered, problem centered and Core curriculum. Designing Local Specific Curriculum
2. Designing Curriculum: Selection and Organization of learning experiences; Components of Design, Sources of Design; Conceptual framework: Horizontal and vertical relationship; dimensions of curriculum design: Scope, Sequence, Continuity, Integration, Articulation and Balance.
3. Models of Curriculum Evaluation: Tyler's Model, Stakes' Model, Scriven's Model, Kirkpatrick's Model
4. Role of students, teachers and educational administrators in curriculum change and improvement.
5. Tools and Techniques of Curriculum evaluation: Observation, Oral, Interview, Opinionnaire and Focus group discussion, rating scale etc. Reflection upon facts and concepts of curriculum development.

Suggested Reading:

1. Aggarwal, J.C (1990). Curriculum Reform in India – World overviews, Doaba World Education Series – 3 Delhi: Doaba House, Book seller and Publisher.
2. Arora, G.L. (1984): Reflections on Curriculum, New Delhi: NCERT.
3. Bonnie, L. (1991). The Management of Sports. St. Louis: Mosby Publishing Company, Park House.
4. Bucher A. Charles, (1993) Management of Physical Education and Sports (10th ed.,) St. Louis: Mobsy Publishing Company.

5. Carl, E, Willgoose. (1982). Curriculum in Physical Education, London: Prentice Hall.
6. Chakraborty & Samiran. (1998). Sports Management. New Delhi: Sports Publication.
7. Charles, A, Bucher & March, L, Krotee. (1993). Management of Physical Education and Sports. St. Louis: Mosby Publishing Company.
8. Chelladurai, P. (1999). Human Resources Management in Sports and Recreation. Human Kinetics.
9. John, E, Nixon & Ann, E, Jewett. (1964). Physical Education Curriculum, New York: The Ronald Press Company.
10. McKernan, James (2007) Curriculum and Imagination: Process, Theory, Pedagogy and Action Research,. U.K. Routledge
11. NCERT (2000). National Curriculum Framework for School Education, New Delhi: NCERT.
12. NCERT (2000). National Curriculum Framework for School Education, New Delhi: NCERT.
13. NCERT (2005). National Curriculum Framework-2005, New Delhi: NCERT.
14. Williams, J.F. (2003). Principles of Physical Education. Meerut: College Book House.
15. Rao, V. K. (2015). Principles of curriculum. New Delhi: APH publishing Corporation.
16. Tala, M. (2012). Curriculum development: Perspectives, principles and issues. Pearson
17. Veer, U. (2014). Modern teaching and curriculum management. New Delhi: Anmol publication.
18. Wiles, J. W., & Bondi, J. C. (2015). Curriculum development a guide to practice. Pearson publication.

Course Code- MPS 509

Course Title- Information & Communication Technology (ICT) in Physical Education

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the necessity of information and communication technology in physical education
- Understand the computer assisted works in Physical education and sports
- Develop understanding about the applications of computer in Physical education and sports
- Understand about E-Learning & Web Based Learning.

Unit I

10 hours

1. Concept, Elements, Process & Types of Communication
2. Communication Barriers & Facilitators of communication
3. Communicative skills of English-Listening, Speaking, Reading & Writing
4. Concept & Importance of ICT Need of ICT in Physical Education
5. Scope of ICT: Teaching Learning Process, Publication Evaluation and Research
6. Administration Challenges in Integrating ICT in Physical Education. A complete understanding and basics of Information and Communication **Technology.**

Unit II**15 hours**

1. Characteristics, Types & Applications of Computers Hardware of Computer: Input, Output & Storage Devices Software of Computer: Concept & Types
2. Computer Memory: Concept & Types Viruses & its Management
3. Concept, Types & Functions of Computer Networks Internet and its Applications Web Browsers & Search Engines Legal & Ethical Issues. Identification of the advanced technologies of computer.

Unit III**10 hours**

1. MS Word: Main Features & its Uses in Physical Education
2. MS Excel: Main Features & its Applications in Physical Education
3. MS Access: Creating a Database, Creating a Table, Queries, Forms & Reports on Tables and its Uses in Physical Education
4. MS PowerPoint: Preparation of Slides with Multimedia Effects
5. MS Publisher: Newsletter & Brochure
6. Windows Accessories: Notepad, Paint, Calculator, Word pad. Reflection upon the applications of ICT.

Unit IV**10 hours**

1. E-Learning & Web Based Learning
 - a. E-Learning
 - b. Web Based Learning
 - c. Visual Classroom
 - d. Mail Merging
 - e. Video Conferencing
 - f. Searching and Browsing Security
2. Using grammar, spell check utilities and printing a document. Practical applications of the ICT in Physical education.

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Readings:

1. Ambekar, A. (2019). Advanced Computing & Ict in Physical Education. Friends Publication.
2. Gupta, R. (2019). Education Technology in Phy Edu, Friends Publication. Friends Publication.
3. Gupta, R. (2019). Information & Communication Technology (Ict) in Physical Education. Friends Publication.
4. Singh, D. (2019). Educational Technologies And Methods Of Teaching in Physical Education. Friends Publication.
5. Singh, T. N. (2019). Computer Application in Physical Education. Friends Publication.

Value Added Course (for other Departments)**Course Code: MPS 532****Course Title: Yoga and Well Being**

L	T	P	Cr
2	0	0	2

Total Hours: 30**Learning Outcomes**

On the completion of the course the students shall be able to;

- Comprehend the importance of Yoga
- Summarize the different types of yoga

- Analyse the relationship between yoga and physical wellbeing

Unit I

7 hours

1. Meaning, Definitions & Historical background of Yoga.
2. Aims & Objectives of Yoga Education.
3. Application & Misconception about Yoga in Modern Society. Peer review of ancient and modern yogic practices.

Unit II

8 hours

1. Shatkarma, Asanas, Pranayama - Types, Techniques, sequencing, and benefits.
2. Concept of Chakras and Aura in Yoga
3. Concept of Triguna and Tridosha in Yoga. Peer discussion of spiritual and body elements in yoga.

Unit III

7 hours

1. Role of Yama and Niyama for Physical and Mental Wellbeing.
2. Philosophy of the sacred syllable “Om” (AUM) for mental and physical wellbeing.
3. Meditation: Meaning, techniques and benefits of meditation. Reflection upon yogic practices for sacred and corporal fitness.

Unit IV

8 hours

1. Yogic lifestyle for Physical and Mental Wellbeing (Ahara, Vihar, Achar, Vichar).
2. Mental relaxation through Prayer – A cross-cultural approach to mental health.
3. Yogic practices for the common health problems: Constipation, Diabetes, Cervical, Arthritis, Backache, Sciatica Pain, Indigestion, Snoring, Eye disorders and Migraine. Peer discussion of yogic techniques to achieve a mentally clear & emotionally calm stable state and yogic practices for the treatment of common ailments.

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Readings:

1. Kotecha.,& Vaidya Rajesh (2016). A Beginner’s Guide to Ayurveda, Chakrapani Publications, Jaipur.
2. Dr. R. S. Bhogal. Yoga Psychology. Kaivalyadhama Publication.
3. Dr. Manmath., M. Gharote., & Dr. Vijay Kant. Therapeutic reference in Traditional Yoga texts.
4. T.S. Rukmani. Patanjala Yoga Sutra.
5. Sahay, G. S. (2013). Hatha Yoga Pradeepika. MDNIY Publication.

Field Practical

Course Code: MPS 528

Course Title: Practical – IV (Running Events- Short, Long Events & Steeplechase)

L	T	P	Cr
0	0	4	2

**Total
Hours: 60**

Learning outcomes:

After completion of the course students will be able to

- Explain the rules & regulations of the Track & Field events.
- Recognize the importance of applied kinesiology and Sports Biomechanics in Track & Field events.

- Analyse the action of muscles used in the skill.
- To enable the students for acquiring relevant skills in Track & Field events.
- To develop skill proficiency in Track & Field events.
- To enable the students to perform at national and international level competitions.
- Perform the skills with proficiency
- Actively participate in Coaching aspects.
- Preparation for the Officiating & Conducting of the event.

Unit – I

15 hours

1. IAAF - Standard Track and Field Marking – Structure and functions of Controlling Bodies National & International.
2. Need and importance of track & Field

Unit –II

15 hours

1. Fundamental of Running – Aims –techniques. Sprint, Middle and Long distance – Relays – Sprint hurdles – Steeplechase.
2. Starting technique – standing start, crouch start and its variations, proper use of blocks.

Unit-III

15 hours

1. Hurdles – approach, clearance over the Hurdle lead leg action, Trail leg action and recovery, middle- and long-distance running.
2. IAAF rules and tie breaking interpretations, Running and walking events – Sprint events, long distance event, walking events.

Unit-IV

15 hours

1. Finishing Techniques – Run through, forward lunging, shoulder shrug. Marathon and Race-walking Objectives and technical characteristics.
2. Drills and Conditioning exercise for Running-Basic-Training Schedule Preparation

Suggested Readings:

1. Schneider, R. C. (2009). Ethics of Sport and Athletics: Theory, Issues, and Application. Wolters Kluwer Health/Lippincott Williams & Wilkins, xxi, 392 p.: ill.; 24 cm.
2. Zeigler, E. F., & Spaeth, M. J. (1975). Administrative Theory and Practice in Physical Education and Athletics.
3. <https://www.worldathletics.org/about-iaaf/documents/book-of-rules>
4. <https://sportsauthorityofindia.nic.in/showimg.asp?ID=580>

Criteria of Continuous Assessment (Total Marks: 50)

- Attainment of Specific Fitness -10 marks
- Execution of Technique: 15Marks
- Demonstration of Skill :15 Marks
- Marking and Measurements -10 marks

Criteria of Term End Assessment (Total Marks: 50)

- Demonstration of Skills and Techniques: 20 Marks
- Coaching and Officiating: 10 Marks
- Preparing Record of Practicals: 10 Marks
- Viva Voce: 10 Marks

Course Code: MPS 529

Course Title: Practical- V (Badminton, Judo, Table Tennis, Tennis, Weight-training , Wrestling – Select Any Two)

L	T	P	Cr
0	0	4	2

Total Hours: 60

Learning outcomes:

After completion of the course students will be able to

- Explain the rules & regulations of the game.
- Recognize the importance of applied kinesiology and Sports Biomechanics in various games.
- To develop mastery on training sessions
- To develop skill proficiency
- Actively participate in Coaching aspects.
- To develop proficiency in Officiating & Conducting of the game.
- To develop critical understanding of application of strategies, tactics during teaching, coaching, competitions.

UNIT -I

10 hours

1. History of Games, Structure and functions of National & International controlling Bodies of particular game.
2. Fundamental skills and drills.Lead up Games.

UNIT -II

10 hours

1. Practical application of different Defensive and Offensive Techniques, Tactics patterns applicable to game.
2. Tactical Training-patterns applicable to game.

UNIT- III

10hours

1. Philosophy of Coaching.
2. Coaching Schedule.
3. Coaching Campus.

UNIT- IV

15 hours

1. General and Specific warming – up routines. Specially preparing, basis and supplementary exercise.
2. Training means for development of different components of physical and motor fitness – Strength, Speed, Endurance, Flexibility coordinative abilities.

UNIT -V

15 hours

1. Psychology preparation of Sportsman/players.
2. Tests, Measurements and Evaluation.
 - I. Skills Tests.
 - II. Test for different fitness components.

Suggested Readings:

1. Geyer Dick (1977). Full Court Control Basketball. Parker Publishing Company, Inc. New York.
2. Allen A.P. (1959). Handbook of Baseball Drills. Prentice-Hall, Inc. New York.
3. Rose. H. Lee (2004). The Basketball Handbook. Human kinetics, USA.
4. Anthony C. Varghese.,&Lowrence V. (2009). Volleyball Player. Handbook Friends Publication, New Delhi.
5. Dumphy Mary & Wilde Rad (2000). Volleyball Today. 2nd Edition, Fritz/Brett.
6. Ranganathan P.P. (2003). Volleyball, A Guide to Playing and Coaching. Friends Publication, Delhi.
7. Soudhu S. Gurbaksh (1982). Volleyball Basic and Advanced. Sports People, Chandigarh.
8. USA Volleyball. (2007). Coaching Youth Volleyball, 4th Edition, Human Kinetics.
9. Wise Mary (1999). Volleyball Drills for Champions. Human Kinetics, Florida.
10. D. Jain (2003). Hockey Skills & Rules. Khel Sahitya Kendra.
11. Flint, Rachael, H. (1976). Women's Hockey London. Pelham Books Ltd.
12. Kapur (1975). Rules of Hockey with Interpretation.
13. P. Narang (2003). Play and Learn Hockey. Khel Sahitya Kendra.
14. Wein,&Horts. (1979). The Science of Hockey. London: Pelham Books.
15. Aneja, O.P. (2012). How to Play Cricket, PrernaPrakashan.
16. Arora, Monika (2005). Cricket Coaching Manual. Sports Publication.
17. Rachna. (2001). Play Better Cricket. Sports Publication.
18. Srivastava, A.K. (2006). How to Coach Bowling. Sports Publication.
19. Syal,&Meenu. (2004). Teach Yourself Cricket. PrernaPrakashan.
20. Tyagi,&Arun Kumar. (2012). Cricket Skills & Rules. Khel Sahitya Kendra.
21. Woolmer,& Bob. (2009). The Art and Science of Cricket. Firefly Book Limited.

Criteria of Continuous Assessment (Total Marks: 50)

- Attainment of Specific Fitness -10 marks
- Execution of Technique: 15Marks
- Demonstration of Skill :15 Marks
- Marking and Measurements -10 marks

Criteria of Term End Assessment (Total Marks: 50)

- Demonstration of Skills and Techniques: 20 Marks
- Coaching and Officiating: 10 Marks
- Preparing Record of Practicals: 10 Marks
- Viva Voce: 10 Marks

Course Code: MPS 530

Course Title: Practical VI (Indigenous Activities and Camping)

L	T	P	Cr
0	0	2	1

Total Hours: 30

Learning outcomes:

After completion of the course students will be able to

- Understand the importance of Indigenous activities and Camping.
- Explain aim, objective, and principles of Camping.
- Elaborate the concept of Camping and its management.
- Develop understanding about Indigenous activity and its importance.

- Actively participate in Indigenous activities and Camping.
- To enable the students for acquiring relevant skills

Unit-I

15 hours

1. Meaning and importance of Indigenous Activities.
2. Types of Indigenous Activities.
3. Indigenous Activities for various age group people.
4. Moral and ethical values of Indigenous Activities.

Unit - II

15 hours

1. Camping and leadership, Aim, objectives and importance of Camping.
2. Organization, Selection, types of Camp and layout of camp site.
3. Learning basic of Camping, basic skill / outdoor skill, Hiking and Trekking, Night Walk, River crossing
4. Compass learning /Orienteering/Cooking / Fire Management/Rope Management

Suggested Readings:

1. Bright Charles K. & Herold C. Meyer. (1953). Recreational test and readings; Eaglewood cliff. New Jersey Prentice Hall.
2. Ness wed, M.H. & New Meyer E.S. Leisure and Recreation, New York: Ronald Press.
3. (1958). Recreation areas: Their Design and equipment's. New York: Ronal Press.
4. Kran, R.G. Recreation and the schools. New York: Mac Melon Company.
5. Shivers J.S., (1964). Principles and practices of Recreational services. London: Mac Melon Company.
6. Butler George (1976). Introduction to Community recreation. Mc Gram Hill Book Company.
7. Kelly, J. R (1982). Leisure Prentice. Hall Inc. Englwood Cliffs N.J.

Criteria of Continuous Assessment (Total Marks: 50)

- Attainment of Specific Fitness -10 marks
- Execution of Technique: 15Marks
- Demonstration of Skill :15 Marks
- Marking and Measurements -10 marks

Criteria of Term End Assessment (Total Marks: 50)

- Demonstration of Skills and Techniques: 20 Marks
- Coaching and Officiating: 10 Marks
- Preparing Record of Practicals: 10 Marks
- Viva Voce: 10 Marks

L	T	P	Cr
0	0	2	1

Course Code: MPS 531

Course Title: Intramural Activities

Total Hours: 30

Learning outcomes:

After completion of the course students will be able to

- To develop proficiency in Sports & Games.

- To enable the students for acquiring relevant skills in various Sports & Games.
- To develop good judgment and fair play in competitions.
- To enhance teamwork, and leadership skills.
- To enhance a social interaction through play within a diverse student body.

Content

The MPES– II Semester students need to participate in the intramural competition to nurture healthy competition, good judgment and fair play, teamwork, and leadership skills. The intramural competition allows students to participate in sport and physical activities without regard for high-performance skill or ability and enhance social interaction through play within a diverse student body and reduce student conflict by encouraging students to manage their emotions appropriately. It will promote a lifestyle of healthy habits through recreation and leisure activity involvement.

Criteria of Continuous Assessment (Total Marks: 50)

- Quality of Conducting Sports Competition – 20
- Preparation of Playing Area – 20 Marks
- Officiating – 10 Marks

Criteria of Term End Assessment (Total Marks: 50)

- Marking of any two Team Game Sports other than specialization -20 Marks
- Marking of any two Individual Sports other than specialization - 20 Marks
- Officiating of any two sports other than specialization - 10 Marks

III SEMESTER

Course Code: MPS 572
Course Title: Sports Psychology

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Understand the concept and meaning of sports psychology.
- Develop understanding about various learning, personality and motivation theories.
- Understand about how the psychological factors affect sports performance.
- Develop the concept of team cohesion and leadership.
- Understand how to assess anxiety, coordination and reaction of athletes.

UNIT- I

10 Hours

1. Importance of Sports Psychology for enhancing sport performance
2. Meaning of Learning -Theories of Learning and their implication in teaching Learning Process
3. Meaning and types of Motivation - Theories of motivation (Abraham Maslow, Need Achievement by McClelland, Weiner Attribution)
4. Measurement of Motivation and Techniques for Developing Motivation
5. Effect of spectator, media on individual and team sports. Reflection upon learning and motivation techniques

UNIT- II**10 Hours**

1. Motor Learning its stages and Plateau effect
2. Theories of Motor Learning (Adams Closed Loop Theory, Schmidt's Schema Theory Ecological Theory)
3. Differentiation and classification of Motor Skills and Sport Skills.
4. Developmental Considerations in Motor Skill Acquisition.
5. Coach Leadership in Sport – (Fiedler's contingency theory, Path-goal theory, Hersey- Blanchard Situational Leadership Theory). Peer review and motor skill learning, coaching

UNIT- III**12 Hours**

1. Personality, Personality Traits and Theories of Personality
2. Role of Personality in Sports and Exercise
3. Measurement of Personality
 - I. Eysneck – EPQ (R)
 - II. Cattle- R.B. Cattle 16 PF
4. Individual Difference and its types
5. Areas of Individual differences. Reflection upon personality difference in sports

UNIT- IV**13 Hours**

1. Concept of Group Dynamics, Team Cohesion, Characteristics of Team Cohesion, Development and Measurement of Cohesion
2. Meaning of Leadership and Component of Effective Leadership, Measurement of Leadership
3. Problems and issues working with Individual and Team Sports
4. Career Transition in Athletes and Retirement Issues, Developing Life Skills in Athletes. Peer review and cohesion in sports, leadership in sports

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Reading:

1. Horn, Thelma (2008). Advances in Sport Psychology. Champaign IL : Human Kinetics Publishers, Inc.
2. Huber, Jeffrey (2012). Applying Educational Psychology in Coaching Athletes. Knowledge Warehouse.
3. Kamlesh, M.L. (2011). Psychology in Physical Education and Sport. (Ed. 3). Delhi Metropolitan Book Co. Pvt. Ltd.
4. Pargonkar, G. V (2015). Sports Psychology. Friends Publications.
5. Taylor, Jim (2017). Assessment in Applied Sport Psychology. Knowledge Warehouse.
6. Weinberg, R.S & Gould, Daniel (2015). Foundations of Sport and Exercise Psychology (Ed. 6). Champaign IL: Human Kinetics Publishers, Inc.

Course Code: MPS 573

Course Title: Sports Psychology Practical

L	T	P	Cr
0	0	2	1

Total Hours: 30**Learning Outcomes**

On the completion of the course the students shall be able to;

- Explain the use of reaction time and coordination assessment instrument
- Describe the process of test construction

- Explain the areas of testing
- Outline the scales used for anxiety, motivation and Personality
- Comprehend the applications of psychological testing in various settings
- Develop insight in various bio-feedback techniques

PRACTICALS

1. Assessment of Reaction Time (Hard-Eye)
2. Assessment of Coordination (Foot-Eye)
3. Analysis of Personality (Eysinck Personality Questionnaire), Big Five Personality Test.
4. Assessment of Achievement Motivation.
5. Assessment of Sport competitive anxiety test
6. Application of Psychological Skill Training
7. Assessment of Sociometry Questionnaire

Criteria of Continuous Assessment (Total Marks: 50)

- Practical Record :10 Marks
- Administration of tool/instrument and interpretation of result-20 marks
- Conducting experiments -20 marks

Criteria of Term End Assessment (Total Marks: 50)

- Conduct of one experiment/ Administration of tool/instrument and Analysis of its result: 30 Marks
- Preparing Record of all Practicals: 10 Marks
- Viva Voce: 10 Marks

Course Code: MPS 527

Course Title: Health Education and Sports Nutrition

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Comprehend the aim, objective and principles of Health Education
- Elaborate the health related problems in India
- Develop understanding about the communicable and non-communicable diseases.
- Aware of school health services.
- Develop understanding about nutrition requirement for players of different games.

UNIT- I

10 hours

1. Concept of Health and Health Education
2. Latest trends in Health Education and global strategy in the field of Health.
3. Role of physical Education Professional on Individual and family in relation to Health and Health Education
4. Epidemiology of Communicable Diseases: Agent factor, Host factor, Environment factors, Mode of Transmission and Prevention of following diseases :
 - i. Tuberculosis
 - ii. Chicken Pox
 - iii. Pneumonia
 - iv. Malaria. Reflection upon current trends of Health Education.

UNIT- II**12 hours**

1. Epidemiology of Non Communicable Diseases: Risk factors and Prevention of following diseases :
 - I. Cardiovascular Diseases.
 - II. Coronary Heart Diseases.
 - III. Hypertension.
 - IV. Cancer.
2. Diseases and their Controlling Programme:
 - I. National Family Welfare Programme
 - II. STD Control Programme
 - III. National Cancer Control Programme
 - IV. National Tuberculosis Control Programme
 - V. National Malaria Control Programme. Understanding of Communicable Disease and its management

UNIT-III**10 hours**

1. Schools Health Services
 - i. Meaning & Objective of School Health Service
 - ii. Health Problem of School Child
 - iii. Role of health education in schools
 - iv. Health Services - Health record, Healthful school environment, first- aid and emergency care
 - v. Mid-day School Programme
2. Role of International Organization in the Development of Health.
 - I. WHO & UNICEF
 - II. FAO & UNESCO
 - III. International Red Cross Society
 - IV. FSSAI. Identification of the services and its role in the development of health.

UNIT-IV**13 hours**

1. Nutrition and Training Adaptations
2. Nutrition and Immune Function in Athletes
3. Eating Disorders in Athletes - Personalized Nutrition and Menu Planning (Meal Timing and Spacing).
4. Nutrition for popular team sports (Basketball, Hockey, Football, Volleyball, Kabaddi and Cricket)
5. Nutrition for Athletics and Endurance Sports (Long distance Swimming, Cycling and Marathon)
6. Nutrition for Strength and Combat sport (Wrestling, Weightlifting, Judo, Boxing, Taekwondo and Fencing). Understanding the importance of Nutrition in sports.

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Reading:

1. Campbell, B. (2013). Sports Nutrition: Enhancing Athletic Performance. CRC Press.
2. Eberle, S. G. (2013). Endurance Sports Nutrition (Ed. 3). Human Kinetics.
3. Fink, H. H., & Mikesky, A. E. (2017). Practical Applications in Sports Nutrition. Jones & Bartlett Learning.

4. Kumar.P (2020). Changing The Lifestyle of Present Health Care: A Much Required Step for A Secured Future The Transmission or Reminder Ancestor's Way of Life once again. Alochana Chakra Journal. Vol. IX. Issue-V
5. Maughan, R. J., & Shirreffs, S. M. (Eds.). (2013). Food, Nutrition and Sports Performance. Routledge.
6. Reaburn, P. R. (Ed.). (2014). Nutrition and Performance In Masters Athletes. CRC Press.
7. Ryan, M. (2012). Sports Nutrition for Endurance Athletes. Velo Press.
8. Sharma, O.P., (2010). Handbook of Health Education & Sports. Khel Sahitya Kendra .
9. Zinner, C., & Sperlich, B. (Eds.). (2016). Marathon Running: Physiology, Psychology, Nutrition and Training Aspects (pp. 1-171). Springer.

Course Code: MPS 553

Course Title: Sports Medicine, Athletes care and Rehabilitation

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Develop understanding about sports medicine and its significance.
- Critically analyze the role of various therapeutic modalities for athletes care and rehabilitation.
- Develop insight about management of sports injuries.
- Understand different techniques of massage.

UNIT-I

12 hours

1. Definition, Need and importance Concept of Sports Medicine
2. Role of Sports Physician and Athletic Trainer in Sports Medicine.
3. Categories of Athletic Injuries: Traumatic and Overuse. Inflammation and Stages injury Healing
4. Athletic Rehabilitation, Role of Therapeutic Exercises in Rehabilitation of Musculo-skeletal athletic injuries. Peer review on needs and importance of various sports injuries

UNIT – II

12 hours

1. Meaning and Concept of Therapeutic Modalities.
2. Therapeutic effects, uses, and contraindications of following therapeutic modalities:
 - a. Cryotherapy (Ice Therapy)
 - b. Short wave Diathermy
 - c. Ultra sound Therapy
 - d. Transcutaneous Nerve Stimulation (TNS)
 - e. LASER Therapy

Reflexion on discussing various therapeutic modalities for sports injuries.

UNIT -III

10 hours

1. Meaning and Definition and role of Massage in sports injuries and rehabilitations.
2. Massage and Prevention of sports injuries.
3. Massage and Sports Performance, Pre-Competition and Post-Competition phase.
4. Psychological Aspect of Sports Massage.

Reflexion of confer massage and it's impact on sports performance and injury rehabilitation.

UNIT - IV

15 hours

1. Importance of rehabilitation equipment (Traction units, sliding sheet, shoulder wheel, quadriceps table, wrist rotators, leg curl, wall pulley, finger board).
2. Bandage –Types of Bandages –strapping/tapping - Application of strapping/tapping and bandage for major joints and body parts.
3. Low back pain, Common causes, General Care, Stretching and strengthening exercises for low back pain.
4. Classification of Therapeutic exercise- Active and passive exercise
5. Balance training, gait training, gym ball exercise. Reflexion of discussing about equipment and bandaging process for rehabilitation.

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Reading:

1. American College of Sports Medicine (2019). ACSM's Body Composition Assessment with Web Resource. Knowledge Warehouse.
2. Bindal, V.D. (2016). Therapeutic and Sports Massage. Agra: Associated Publishing House.
3. Johnson, J. C. (2011). Postural Assessment. Human Kinetics.
4. Kumar, P. (2019). Management of Obesity Induced Forward Head Posture Deformities Through Sports. International Journal of Physical Education, Sports and Health.
5. Madden, C. & Netter, F. (2010). Netter's Sports Medicine. PA: Philadelphia. Saunders/Elsevier.
6. Norris, C. M. (2018). Sports and Soft Tissue Injuries: A Guide for Students and Therapists. Routledge.
7. Singh, A. (2014). Complete Guide to Sports Injuries. Friends Publications.
8. Singh, A. (2016). Athletic Care and Rehabilitation. Friends Publications.
9. Uppal, A. K. (2015). Posture, Athletic Care and First Aid. Friends Publications.

Course Code: MPS 554

Course Title: Sports Medicine, Athletes Care and Rehabilitation (Practical)

L	T	P	Cr
0	0	2	1

Total Hours: 30

Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the application of various therapeutic modalities
- Develop insight in techniques of massage
- Learn active and passive exercise for rehabilitation

PRACTICALS

1. Orientation of most commonly used Therapeutic Modalities (Infrared, Wax bath, Ultrasound, Short wave Diathermy, TNS, LASER Therapy).
2. Orientation of most commonly used Massage Techniques in the treatment of sports injuries.
3. Orientation of Active and Passive exercises for rehabilitation

Criteria of Continuous Assessment (Total Marks: 50)

- Practical Record :10 Marks
- Administration of tool/instrument and interpretation of result-20 marks
- Conducting experiments -20 marks

Criteria of Term End Assessment (Total Marks: 50)

- Conduct of one experiment/ Administration of tool/instrument and Analysis of its result: 30 Marks
- Preparing Record of all Practicals: 10 Marks
- Viva Voce: 10 Marks

Course Code: MPS 574 (Discipline Enrichment Course -DEC)

Course Title: Comprehensive view of Physical Education

L	T	P	Cr
2	0	0	2

Total Hours: 30

Learning Outcomes

On the completion of the course the students shall be able to;

- Define philosophies in various countries and its implication towards physical education.
- Explain growth and development in physical education in India.
- Review what policies and programmes can work to close gender gaps, with a focus on developing countries in physical education.
- Elaborate on the constitutional provisions for gender equality in India.
- Identify gender perspectives in some major policy documents in India

Unit – I

6 Hours

1. Physical education and adapted physical education, their objectives
2. Philosophies of education as applied to physical education
3. Development of Physical education in Greece, Rome, Sweden, Russia England, Denmark, Germany, USA, Australia and China.

Unit- II

8 Hours

1. Growth and development of physical education in India
2. Recreation- its principles, characteristics and importance; Modern trends in recreation; Indoor and outdoor recreational programmes.
3. Recreational programmes for various categories of people and its impact
4. Structure and functions of international and national bodies controlling various games and sports
5. Prominent honours and awards in games and sports.

Unit-III

8 Hours

1. Role of Government agencies monitoring professional courses in physical education
2. Qualities, qualifications and responsibilities of physical education personnel at primary, secondary and higher education levels
3. Recent Government policies for promoting physical education and sports in India
4. Hierarchy of organizational set-up in physical education at schools, colleges and university level
5. Role of public & private sectors in the promotion of physical education and sports in the country.

Unit- IV

8 Hours

1. Definition, concept and importance of inclusive education
2. Historical perspectives on education of children with diverse needs
3. Difference between special education, integrated education and inclusive education
4. Advantages of inclusive sports education for all children, Educational approaches and measures for meeting the diverse needs
5. Sports and Gender:- Gender Equity and Women in Sports, Building inclusive learning friendly sports facilities, overcoming barriers for inclusion.

Suggested Reading:

1. Chanana, Karuna (ed) Socialisation, Education and Women, Orient Longman, New Delhi, 1988
2. Mandell, Nancy (ed), Feminist Issues: Race, Class and Sexuality, Prentice Hall, Ontario, 1995
3. Nambissan, Geeta B, Gender and Education: The Social Context of schooling Girl Children in India, 1995.
4. Erik Olin Wright, "From Paradigm Battles to Pragmatist Realism: towards an integrated class analysis", New Left Review (forthcoming)
5. Daryl Glaser, "Class as a Normative Category: Egalitarian Reasons to Take It Seriously (With a South African Case Study)
6. Daryl Glaser, 'Should An Egalitarian Support Black Economic Empowerment?', Politikon, vol. 34, no. 2, 105-123, 2007.
7. John Roemer paper: "Should Marxist's care about exploitation" in Analytical Marxism and Philosophy & public affairs 1985 Michael Marmot, Richard Wilkinson, Social Determinants of Health: The Solid Facts

Course Code: MPS 600
Course Title: Research Proposal

L	T	P	Credits
0	0	8	4

Total Hours: 120

Learning outcomes

After completion of the course students will be able to

- Identify research gaps on a selected research area
- Summarize the findings of different research studies
- Formulate objectives, different types of hypothesis and research questions
- Select appropriate approach and design for different research topics
- Develop tools for research
- Practice writing references using APA format
- Prepare a research proposal on any emerging problem in physical education and sport

Content

1. Identification and Selection of Research Problem
2. Review of Related Literature
3. How to identify the gaps in research?
4. Writing title of research problem
5. Formulation of Objectives, Hypotheses/ Research questions
6. Writing Rationale of Study
7. Writing of a suitable design and approaches for the research proposal
8. Identify appropriate tools for their study
9. Writing of reference in APA 7th edition format

Suggested Readings

- Best, J.W. (1999). Research in education. New Delhi: Prentice Hall of India Pvt. Ltd.
- Bogdan, R.C., & Biklen, S.K. (2014). Qualitative research for education: an introduction to theory and methods. New Delhi: PHI Learning Pvt. Ltd.
- Chandra, S.S., & Sharma, R.K. (2010). Research in education. New Delhi: Atlantic Publications.
- Guthrie, G.B. (2010). Basic research methods: An entry to social science research. New Delhi. Sage Publications India Pvt. Ltd.
- Kaul, L. (1984). Methodology of educational research. New Delhi: Vikas Publications.

- Kerlinger, F.N. (1986). Foundations of behavioural research. Fort Worth TX: Harcourt Bmce Jovanovich.
- Kumar, R. (2011). Research methodology. New Delhi: Sage Publications India Pvt. Ltd.
- Newby, P. (2014). Research methods for education. New York: Routledge Publications.
- Pathak, R. P. (2015). Methodology of educational research. New Delhi: Atlantic Publications.
- Richards, L., & Morse, J.M. (2013). Qualitative methods. U.S.A: Sage Publications, Inc.
- Wellington, J. (2015). Educational research. USA: Bloomsbury Academic Publications.

Suggested websites

- www.education.com
- www.academia.edu
- www.okstate.edu
- www.aect.org
- www.oxfordbibliographies.com
- www.academia.edu
- www.southalabama.edu

Evaluation Criteria:

Research Proposal (Third Semester)		
	Marks	Evaluation Method
Supervisor	50	Dissertation proposal and presentation
HoD and Senior-most Faculty of the Department	50	Dissertation proposal and presentation

Discipline Elective

Course Code: MPS 563

Course Title: Physical Fitness and Wellness

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Interpret the basic concept of physical fitness and its components.
- Develop understanding about nutrition.
- Develop understanding about establishment of fitness centre.
- Able to design fitness training programme for different age group.

Unit I**10 hours**

1. Meaning & Definition of Physical Fitness and Wellness.
2. Components of Physical Fitness and Wellness.
3. Techniques and Principles of Physical fitness
4. Leisure time physical activity for community development
5. Current trends in fitness and conditioning. Reflection upon current trends of fitness and wellness

UNIT- II**8 hours**

1. Meaning and Definition of Nutrition
2. Daily calories intake & burning
3. Food Guide Pyramid and its importance
4. Influences of food on social cultural values
5. Exercise and Metabolism & Burning. Peer discussion and balance diet plan

UNIT- III**15 hours**

1. Stress assessment & its management
2. Prominent health problem associated with inactivity.
3. Measurement of Body Composition
4. Safety techniques (Spotting, proper body alignment, lifting techniques, spatial awareness. and proper breathing techniques)
5. Concept of free weight Vs. machine, variation of sets and repetitions, Exercise with Swiss & Medicine Ball, Theraband and Tubing. Peer review and training with modern fitness gadgets

UNIT- IV**10 hours**

1. Establishment and Management of Fitness Centre
2. Principles of starting a fitness centre-environment, location, policy, offer of programmes, record keeping, public relation
3. Fitness centre membership and its types. Safety aspects in a fitness centre
4. Concept of designing different fitness training programme for different age group (Group and Personal)
5. Concepts of designing fitness training programme for diabetes and cardiac patients. Reflection upon design of fitness modules

PRACTICALS

- Orientation and management of fitness centre, various equipments and wet zone
- Different methods of measuring Body Composition (BMI, Waist Hip Ratio, Skinfold Caliper).
- Different Fitness Test (Cardio-respiratory Endurance, Strength, Strength Endurance, Flexibility, Body Composition, Anthropometric Measurements and Grip Dynamometer)

Suggested Readings:

1. A.K. Uppal, Physical Fitness, Friends Publications (India), 1992.
2. Corbin, C. (2011). Concepts of physical fitness. New York: McGraw-Hill Higher Education. ISBN-10: 9780073523828 ISBN-13: 978-0073523828
3. David K. Miller & T. Earl Allen, Fitness, A life time commitment, Surjeet Publication Delhi 1989.
4. Dificore Judy, the complete guide to the postnatal fitness, A & C Black Publishers Ltd. 35, Bedford row, London 1998.
5. Elizabeth & Ken day, Sports fitness for women, B.T. Batsford Ltd, London, 1986.

6. Emily R. Foster, Karyn Hartiger & Katherine A. Smith, Fitness Fun, Human Kinetics, Publishers 2002.
7. Greenberg, J., Dintiman, G., & Myers Oakes, B. (2004). Physical fitness and wellness. Champaign, IL: Human Kinetics. ISBN-13: 978-0736046961. ISBN-10: 0736046968
8. Hoeger, W., & Hoeger, S. Fitness & wellness (2013) Belmont, CA: Wadsworth, Cengage Learning ISBN-13: 978-1285733159 ISBN-10: 1285733150
9. Lawrence, Debbie, Exercise to Music. A & C Black Publishers Ltd. 37, Sohe Square, London 1999.
10. Warner W.K. Oeger & Sharon A. Hoeger, Fitness and Wellness, Morton Publishing Company, 1990.

Course Code: MPS 526

Course Title: Value and Environmental Education

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

On the completion of the course the students shall be able to;

- Analyze the relationship between value and environmental education
- Develop skills of protecting the environment
- Understand to know different tradition and custom of India.
- Critically analyze the rural and urban health and sanitation related problems

UNIT-I

10 hours

1. Meaning and Definition of Value Education.
2. Need, Importance and Objectives of Value Education
3. Need and Theories of Moral Values.
4. Human Value foundation
5. Classification of Values: Basic Values of Religious. Understanding the human values & its importance.

UNIT - II

8 hours

1. Meaning and Definition of Value System
2. Personal and Communal Values - Consistency, Internally consistent, internally inconsistent, Judging Value System
3. Commitment and commitment to values. A complete understanding of Value Systems.

Unit- III

15 hours

1. Meaning and Definition of Environmental Studies
2. Scope and Importance of environmental studies
3. Historical back ground of environmental education
4. Celebration of various days in relation with environment,
5. Plastic recycling & prohibition of plastic bag/cover
6. Role of school in environmental conservation and sustainable development, Pollution free eco- system. Reflection upon the Environmental studies and its importance.

Unit – IV

12 hours

1. Rural and Urban Health Problems and their causes
2. Improvement of Rural Sanitation
3. Education Activity and Services of Urban, Slum Area and Urban Area,

4. Fairs & Festivals of Rural Area
5. Meaning, Causes and Prevention of Air Pollution, Water Pollution, Noise Pollution and Thermal Pollution. Detailed comparison among the Rural & Urban issues.

Transaction Mode: Lecture, Demonstration, Group Discussion, Project Method, Seminar, Dialogue

Suggested Reading:

1. Athman, J., & Monroe, M. (2004). The Effects of Environment-Based Education on Students Achievement Motivation. *Journal of Interpretation Research*. 9(1), 9-25.
2. Jadhav, H., & Bhosale, V. M. (1995). *Environmental Protection and Laws*. Himalaya Pub. House.
3. Jitendra Kumar Thakur (2019). *Value and Environmental Education*. Sports Publication.
4. Mohit Chakrabarti (2008). *Value Education: Changing Perspective*. Kanishka Publication.
5. Singh, B. (2018). *Value and Environmental Education*. Friends Publications.
- Vandana Meshram Ingle (2017). *Value and Environmental Education*. Educational

Course Code: MPS 564

Course Title: Entrepreneurship in Physical Education

L	T	P	Cr
3	0	0	3

Total Hours: 45

Learning Outcomes

After completion of the course students will be able to:

- Demonstrate entrepreneurial behavior, skills and attitudes and build motivation towards an entrepreneurial lifestyle and occupation
- Feel the lifeworld of the entrepreneur and understand key entrepreneurial values
- Grasp the key generic entrepreneurship competencies in practice and apply the process of setting up an organization.
- Holistically develop and manage sustainable entrepreneurial organization and develop the relationships they need to have with key stakeholders.
- Elaborate the role of teachers and learners in Entrepreneurship Education

UNIT I

10 hours

1. Entrepreneurship in Physical Education: meaning, need and concept, characteristics of entrepreneurship in physical education.
2. Introduction to Entrepreneurship – Introduction to physical education entrepreneurship and technology ventures.
3. Physical education Post Graduates as an entrepreneurs, Mindset of the Entrepreneurial Leader, Creating and selling the Entrepreneurial value Proposition. A complete understanding of Entrepreneurship in Physical Education.

UNIT II**15 hours**

1. Idea Generation & Feasibility Analysis – Entrepreneurial Idea generation and Feasibility Analysis.
2. Technology commercialization potential, Paths, and barriers from Idea to Market.
3. Assessing and presenting the opportunity (Students should be asked to give the Complete Business Proposal Presentation for the idea they generated.)
4. Entrepreneurial competencies; Creativity and entrepreneurial education; problem solving and entrepreneurship
5. Value education and entrepreneurship in education; entrepreneurial behavior. Reflexion upon Factors affecting the entrepreneurship.

UNIT III**10 hours**

1. Business Planning and Execution – Business Structuring & Strategy.
2. Business Planning and the business plan, Financial analysis, and projections.
3. Market and competitive analysis, Presentation of opportunity, Venture growth and value harvesting.
4. Progression Model for Entrepreneurial Education; Active, process-based, project centric, collaborative. Importance of Entrepreneurial Education in business.

UNIT VI:**15 hours**

1. Case Analysis on achievement gaps and performance improvement of different ventures.
2. Real time interaction with entrepreneurs, Business Plan presentation, Written Business Plan presentation, Financial projections
3. Future perspectives of entrepreneurship in physical education
4. Prepare a proposal for start-up of any educational venture. Planning and execution of the business in Physical Education.

Transaction Mode

Experiential pedagogy, Lecture, Seminar, e-team teaching, e-tutoring, dialogue, peer group discussion, mobile teaching, self-learning, Collaborative learning, Cooperative learning and, field trip

Suggested Readings

1. Entrepreneurship Development :Indian cases on change agents, Tata McGraw Hill, K. Ramchandran.
2. Aggrwal, A. (2013). Scope of Entrepreneurship development in India
3. Balasubramanian, A. (September 5, 2012). Entrepreneurship Education.
4. European Commission (2008). Entrepreneurship in higher education, especially within non-business studies. Brussels: Final Report of the Expert Group.
5. Erkkilä, K. 2000. Entrepreneurial education: mapping the debates in the United States, the United Kingdom and Finland, Abingdon, Taylor & Francis.
6. Minniti, M. & Bygrave, W. 2001. A Dynamic Model of Entrepreneurial Learning. Entrepreneurship Theory and Practice, 25, 5-16.

Field Practical

L	T	P	Cr
0	0	4	2

Course Code: MPS 558**Course Title: Practical – VII (Jumping Events- Long Jump, Triple Jump & High Jump)****Total Hours: 60**

Learning outcomes:

After completion of the course students will be able to

- Explain the rules & regulations of the Track & Field events.
- Recognize the importance of applied kinesiology and Sports Biomechanics in Track & Field events.
- Analyse the action of muscles used in the skill.
- To enable the students for acquiring relevant skills in Track & Field events.
- To develop skill proficiency in Track & Field events.
- To enable the students to perform at national and international level competitions.
- Perform the skills with proficiency
- Actively participate in Coaching aspects.
- Preparation for the Officiating & Conducting of the event.

Unit-I **15 hours**

- I. History of Jumping events World wide- Indian Athletes History-Fundamentals of Jumping events – teaching and coaching of jump events.

Unit-II **15 hours**

- I. Fundamental of Various Jumping techniques, long jump – triple jump – high jump- Pole vault.
- II. Advantages of technical characteristics of jumping events.

Unit-III **15 hours**

- I. IAAF rules and ties breaking interpretations of jumping events.
- II. Warming-up and cooling down Exercises for Various Jumping Events.

Unit-IV **15 hours**

- I. Drills and Conditioning exercise for Jumping Events-Basic-Training Schedule Preparation.

Suggested Reading:

1. Schneider, R. C. (2009). Ethics of Sport and Athletics: Theory, Issues, and Application. Wolters Kluwer Health/ Lippincott Williams & Wilkins.
2. Zeigler, E. F., & Spaeth, M. J. (1975). Administrative Theory and Practice in Physical Education and Athletics.
3. <https://www.worldathletics.org/about-iaaf/documents/book-of-rules>
4. <https://sportsauthorityofindia.nic.in/showing.asp?ID=580>

Criteria of Continuous Assessment (Total Marks: 50)

- Attainment of Specific Fitness -10 marks
- Execution of Technique: 15Marks
- Demonstration of Skill :15 Marks
- Marking and Measurements -10 marks

Criteria of Term End Assessment (Total Marks: 50)

- Demonstration of Skills and Techniques: 20 Marks
- Coaching and Officiating: 10 Marks
- Preparing Record of Practicals: 10 Marks
- Viva Voce: 10 Marks

SPORTS SPECIALIZATION -I

L	T	P	Cr
0	0	6	3

Course Code: MPS 565

Course Title: Sports Specialization-I (Badminton, Basketball, Cricket, Football, Handball, Hockey, Judo, Kabaddi, Table Tennis, Tennis, Volleyball, Weight Lifting, Yoga - Select Only One)

Total Hours: 90

Learning outcomes:

After completion of the course students will be able to

- Explain the rules & regulations of the game.
- Recognize the importance of applied kinesiology and Sports Biomechanics in various games.
- To develop mastery on training sessions
- To develop skill proficiency
- Actively participate in coaching aspects.
- To develop proficiency in Officiating & Conducting of the game.
- To develop critical understanding of application of strategies, tactics during teaching, coaching, competitions

Sports Theory I : Badminton

UNIT-I

45 hours

Foundation & Rules

1. Historical development in India and World Level
2. Rules/Laws of Badminton and their interpretation
3. Latest changes of rules/laws & their impact on the game
4. Rules & Laws of Para Badminton (Badminton for people with Disability).
5. Qualifying system of major national and international tournaments.

UNIT-II

45 hours

Officiating

1. Play area dimension and marking
2. Equipment specification
3. Qualities & qualification of an official
4. Role of officials and their duties and responsibilities.
5. Mechanics of officiating
6. Score sheet : use and interpretation
7. Organization of badminton competition at national and international level

REFERENCES

- ❖ Downey, J. C., & Brodie, D. (1980). Get Fit for Badminton: A Practical Guide to Training for Players and Coaches. Pelham Books.
- ❖ Downey, Jake (1993). Winning Badminton Doubles How to coach Badminton. Published by Jake Downey.
- ❖ Downey, Jake (1982). Better Badminton for All. Pelham Books .
- ❖ Downey, Jake (1993). Excelling at Badminton (Beyond the Basics). Teach Yourself Books.
- ❖ Downey, Jake (2007). Tactics in Badminton Singles. e-book.
- ❖ Grice (2007). Badminton Steps to Success (2nd Edition). Human Kinetics.
- ❖ John Edwards (1997). Badminton: Technique, Tactics, Training (Crowood Sports Guides).The Crowood Press Ltd.
- ❖ Mark Golds (2002). Badminton (Series - Skills of the Game).The Crowood Press Ltd.

Sports Theory I : Basketball

UNIT-I

45 hours

Foundation & Rules

1. Historical development in India and World Level
2. Rule of Basketball Game and their interpretation
3. Latest changes of rules & their impact on the game
4. Record/Statistics and awards of the game
5. Main tournament of basketball organized at national and international level
6. Qualifying system of major national and international tournaments.

UNIT-II

45 hours

Officiating

1. Play area dimension and marking
2. Equipment specification
3. Qualities & qualification of an official
4. Mechanics of officiating
5. Three man officiating
6. Score sheet : use and interpretation
7. Organization of competition and fixtures.

Suggested Reading:

- ❖ OBE, F. W. D. (2014). Sports Training Principles: An Introduction to Sports Science. Bloomsbury Publishing.
- ❖ Geyer, D. (1977). Full Court Control Basketball: A Flexible Offense to Exploit Opponents' Weaknesses. Parker Publishing Company.
- ❖ Allen, A. P. (1959). Handbook of Baseball Drills. Prentice-Hall.
- ❖ McGuire Frank. (1959). Defensive basketball. Prentice-Hall, Inc. New York.
- ❖ Kanika K. (2001). Basketball Coaching Manual. Sports Publication.
- ❖ Vaidhya & Rajesh. (2007). Skills & Tactics Basketball. Sports Publication. New Delhi.
- ❖ Boe, Clair and Norton (1959). Men to Men Defense and Attack. New York: Ronald Press Company.

Sports Theory I : Cricket

UNIT-I

45 hours

Introduction :

1. Historical development in India and World Level
2. Rule of Cricket and their interpretation
3. Latest changes of rules & their impact on the game
4. National and International Bodies, Controlling Cricket and their functions.
5. Qualities of a Coach and his/her duties and responsibilities.
6. Captaincy in Cricket :
 - a. Qualities
 - b. Duties of Captain - General, Batting, Fielding
 - c. Symptoms of bad captaincy

UNIT-II

45 hours

Officiating

1. Layout, construction and maintenance of various types of Cricket pitches.
2. Equipment specification
3. Qualities & qualification of an official
4. Mechanics of officiating
5. Score sheet : use and interpretation
6. Organization of competition and fixtures.

Suggested Reading:

- ❖ Aneja, O.P. (2012). How to Play Cricket. Prerna Prakashan.
- ❖ Arora & Monika. (2005). Cricket Coaching Manual. Sports Publication.
- ❖ Bharadwaj & Arun. (2008). Coaching Batting Skills. Royal Colour Cartons.

- ❖ Kutty Suresh. (2003). Fielding Drills in Cricket. Sports Publication.
- ❖ Rachna. (2001). Play Better Cricket. Sports Publication.
- ❖ Srivastava, A.K. (2006). How to Coach Bowling. Sports Publication.
- ❖ Srivastava, Vijay Kumar. (2007). Analysis of Cricket Skills. Sports Publication.
- ❖ Syal, Meenu. (2004). Teach Yourself Cricket. Prerna Prakashan.
- ❖ Tyagi, Arun Kumar. (2012). Cricket Skills & Rules. Khel Sahitya Kendra.
- ❖ Woolmer, Bob. (2009). The Art and Science of Cricket. Firefly Book Limited.

Sports Theory I : Football

UNIT-I

45 hours

Foundation & Rules

1. Historical development in India and World Level
2. Laws of the game and their interpretation and practical implications in match situation.
3. Record/Statistics and awards of the game
4. Main tournament of football organized at national and international level
5. Qualifying system of major national and international tournaments.

UNIT-II

45 hours

Officiating

1. Play area dimension and marking
2. Equipment specification
3. Qualities & qualification of an official
4. Mechanics of officiating
5. Score sheet : use and interpretation
6. Organization of competition and fixtures.

Suggested Reading:

- ❖ Wade, A. (1967). The FA-guide to training and coaching. London: The Football Association.
- ❖ Csanádi, Á. (1972). Soccer: Technique-tactics-coaching. Corvina Press.
- ❖ Beswick, B. (2010). Focused for soccer (Vol. 9, p. 12). Champaign, IL: Human Kinetics.
- ❖ Bobby Moffat .(1985). The Basic Soccer Guide. Collier Books.
- ❖ Reilly, T. (2003). Motion analysis and physiological demands. Science and soccer, 2, 59-72.

Sports Theory I : Handball

UNIT-I

45 hours

Foundation & Rules

1. Historical development in India and World Level
2. Rule of Handball Game and their interpretation
3. Latest changes of rules & their impact on the game
4. Record/Statistics and awards of the game
5. Main tournament of handball organized at national and international level
6. Qualifying system of major national and international tournaments.

UNIT-II

45 hours

Officiating

1. Play area dimension and marking
2. Equipment specification
3. Qualities & qualification of an official
4. Mechanics of officiating
5. Score sheet : use and interpretation
6. Organization of competition and fixtures.

Suggested Reading:

- ❖ Clanton, R. E., & Dwight, M. P. (1996). Team handball: Steps to success. Human Kinetics.

- ❖ Nikola Radice & Mitjallc. (2013). Handball : from beginner to top player. Self-publishing N. Radic Publisher.
- ❖ Baha M. Hamil & James D. LaPoint (1994). Team Handball: Skills, Strategies and Training. Eddie Bowers Publishing Company.
- ❖ Bernath E. Phillips .(2013). Fundamental Handball. Literary Licensing publisher.

Sports Theory I : Hockey

UNIT-I

45 hours

Foundation & Rules

1. Historical development in India and World Level
2. Rule of Hockey Game and their interpretation
3. Latest changes of rules & their impact on the game
4. Record/Statistics and awards of the game
5. Main tournament of hockey organized at national and international level
6. Qualifying system of major national and international tournaments.

UNIT-II

45 hours

Officiating

1. Play area dimension and marking
2. Equipment specification
3. Qualities & qualification of an official
4. Mechanics of officiating
5. Score sheet : use and interpretation
6. Organization of competition and fixtures.

Suggested Reading:

- ❖ Dilip K. Dureha & Akhil Mehrotra (2003). Teaching and Coaching Hockey. Janvani Prakashan (P) Ltd.
- ❖ Flint, R. H. (1976). Women's Hockey. Pelham Books.
- ❖ Taylor, I. C., & Vear, D. (1988). Taylor on Hockey. MacDonald, Queen Anne Press.
- ❖ Narang, P. (2003). Play and Learn Hockey. Pinnacle Technology.
- ❖ Singh. Gian and Wallia Kuku. (1979). Learn Hockey this way. Commercial Publication Bureau, New Delhi.
- ❖ Wein, H. (1979). The science of hockey. (D. Belchamber, Trans.).

Sports Theory I : Judo

UNIT-I

45 hours

Foundation & Rules

1. Historical development in India and World Level
2. Rules of Judo and their interpretation
3. Latest changes of rules & their impact on the game
4. Record/Statistics and awards of the game
5. Qualifying system of major national and international tournaments.

UNIT-II

45 hours

Officiating

1. Dimension of playing Arena
2. Qualities & qualification of an official
3. Role of officials and their duties and responsibilities.
4. Mechanics of officiating
5. Score sheet : use and interpretation
6. Organization of judo competition at national and international level

Suggested Reading:

- ❖ Hill, Robert. (2010). World of Martial Arts. 128 Valley Ln London, Kentucky: LuLu Publishing.
- ❖ Kashiwazaki, Katsuhiko. (1992). Shimewaza, Judo Masterclass Techniques. London: Ippon Books.
- ❖ Kashiwazaki, Katsuhiko. (1997). Osaekomi, Judo Masterclass Techniques. London: Ippon Books.
- ❖ Toshiro Daigo. (2016). Kodokan Judo Throwing Techniques. Kodansha International; Reprint edition.
- ❖ Steve Scott. (2019). The Judo Advantage. YMAA Publication Center.

Sports Theory I : Kabaddi

UNIT-I

45 hours

Foundation & Rules

1. Historical development in India and World Level
2. Rule of Kabaddi Game and their interpretation
3. Latest changes of rules & their impact on the game
4. Record/Statistics and awards of the game
5. Main tournament of kabaddi organized at national and international level
6. Qualifying system of major national and international tournaments.

UNIT-II

45 hours

Officiating

1. Play area dimension and marking
2. Equipment specification
3. Qualities & qualification of an official
4. Mechanics of officiating
5. Score sheet : use and interpretation
6. Organization of competition and fixtures.

Suggested Reading:

- ❖ Siddharth (2016). "Kabaddi Introduction, Rules, Information, History & Competitions". Sportycious. Retrieved 28 January 2020.
- ❖ Rules of Kabaddi". International Kabaddi Federation (IKF). Archived from the original on 4 March 2016. Retrieved 26 August 2014.
- ❖ S. Muniraju. (2015). A Text Book on Kabaddi: Kabaddi, Skills Techniques and Strategies. Lap Lambert Academic Publishing.
- ❖ E. Prasad Rao. (2002). Kabaddi- the complete hand book. Jagadamba Publications, Vizianagaram, A.P.

Sports Theory I: Table Tennis

UNIT-I

45 hours

Foundation & Rules

1. Historical development in India and World Level
2. Rule of Tennis and their interpretation
3. Latest changes of rules & their impact on the game
4. Table Tennis in Paralympics.
5. Record/Statistics and awards of the game
6. Qualifying system of major national and international tournaments.

UNIT-II

45 hours

Officiating

1. Play area dimension and marking
2. Equipment specification
3. Qualities & qualification of an official
4. Mechanics of officiating
5. Score sheet : use and interpretation
6. Organization of tennis competition at national and international level

Suggested Reading:

- ❖ International Table Tennis Federation Level 1 Coaching Manual, 2003.

- ❖ Bose, Tapan and Mukherjee, Bhawani. (2000). Table Tennis Training Manual. (Phulkian Press Pvt. Ltd., SAI, NSNIS, Patiala, India.
- ❖ Fairholm, David. (1985). The Pocket Guide to Table-Tennis Tactics. Bell and Hyman Denmark House 37/39, Queen Elizabeth Street, London.
- ❖ Hodges, L. (1993). Table tennis: steps to success. Human Kinetics 1.
- ❖ Sklorz, Martin. (1973). Table Tennis. John Blackburn Ltd.

Sports Theory I : Tennis

UNIT-I

45 hours

Foundation & Rules

1. Historical development in India and World Level
2. Rule of tennis Game and their interpretation
3. Latest changes of rules & their impact on the game
4. Rules of Wheel chair Tennis.
5. Record/Statistics and awards of the game
6. Qualifying system of major national and international tournaments.

UNIT-II

45 hours

Officiating

1. Play area dimension and marking
2. Equipment specification
3. Qualities & qualification of an official
4. Mechanics of officiating
5. Score sheet : use and interpretation
6. Organization of tennis competition at national and international level

Suggested Reading:

- ❖ Braden, V. and Bruns, B., (1998). Tennis 2000: Strokes, Strategy and Psychology for a Lifetime. 1st ed. New York: Little, Brown and Company.
- ❖ Groppe, J., (1992). High tech tennis. 1st ed. Champaign, Ill.: Leisure Press.
- ❖ Hoskins, T., (2003). The Tennis Drill Book. 1st Ed. Champaign, Ill.: Human Kinetics.
- ❖ Knudson, D., (2006). Biomechanical Principles of Tennis Technique. 1st ed. Vista: USRSA.
- ❖ Rowland, T., (2014). Tennisology. 1st ed. Champaign: Human Kinetics.
- ❖ Steve Beier (2009). More Than a Game: Learning Life Skills from Tennis Skills Paperback – Import. Author House Publisher.

Sports Theory I : Volleyball

UNIT-I

45 hours

Foundation & Rules

1. Historical development in India and World Level
2. Rule of Kabaddi Game and their interpretation
3. Latest changes of rules & their impact on the game
4. Record/Statistics and awards of the game
5. Main tournament of kabaddi organized at national and international level
6. Qualifying system of major national and international tournaments.

UNIT-II

45 hours

Officiating

1. Play area dimension and marking
2. Equipment specification
3. Qualities & qualification of an official
4. Mechanics of officiating
5. Score sheet : use and interpretation

6. Organization of competition and fixtures.

Suggested Reading:

- ❖ Anthony C. Varghese & Lawrence V. (2009). Volleyball Player. Handbook Friends Publication, New Delhi.
- ❖ Dumphy Mary & Wilde Rad. (2000). Volleyball Today (2nd Edition). Fritz/Brett.
- ❖ Ranganathan P.P. (2003). Volleyball, A Guide to Playing and Coaching. Friends Publication, Delhi.
- ❖ Resser C. Jonathan & Bohr Roald. (2003). Volleyball. Blockwell.
- ❖ Sagar S.K. (2001). Play Better Volleyball. Sports Publication, Delhi.
- ❖ Soudhu S. Gurbaksh. (1982). Volleyball Basic and Advanced. Sports People, Chandigarh.
- ❖ American Sport Education Program. (2007). Coaching Youth Volleyball. Human Kinetics.
- ❖ Wise, M. (1999). Volleyball drills for champions. Human Kinetics.

Sports Theory I : Weight Lifting

UNIT-I

45 hours

Foundation & Rules

1. Historical development in India and World Level
2. Rule and Regulation of weightlifting and their interpretation
3. Latest changes of rules & their impact on the game
4. Record/Statistics and awards of the game
5. Qualifying system of major national and international tournaments.

UNIT-II

45 hours

Officiating

1. Play area dimension and marking
2. Equipment specification
3. Qualities & qualification of an official
4. Mechanics of officiating
5. Score sheet : use and interpretation
6. Organization of weightlifting competition at national and international level

Suggested Reading:

- ❖ Hand Book of International Weight Lifting Federation. Published by the International Weight Lifting Federation, Budapest – Hungary 2005-08.
- ❖ Singh Hardayal (1995). Science of Sports Training” D.V.S. Publication Giri Nagar, Kalki.
- ❖ Vella Mark (2007). Anatomy for Strength and Fitness Training: An Illustrated Guide to your muscles in Action, New Holland Publishers Ltd.
- ❖ Joe Kenn (2003). Coach's Strength Training. Coaches Choice Publisher .
- ❖ Mohamed F. El-Hewie (2006).Essentials of Weightlifting and Strength Training Hardcover. Shaymaa Publishing Corporation.
- ❖ Greg Everett (2016). Olympic Weightlifting: A Complete Guide for Athletes & Coaches. Catalyst Athletics, LLC
- ❖ Bob Takano (2012). Weightlifting Programming: A Winning Coach's Guide. Catalyst Athletics, LLC

Sports Theory I : Yoga

Unit-I

45 hours

1. Historical Background of Yoga
2. Yoga according to various scriptures
3. Introduction to different schools of Yoga
4. Famous yogis and their contribution in Yoga
5. Application & misconception about yoga in modern society

Unit-II**45 hours**

1. Significant governing bodies of Yoga at India and World level.
2. Competition System & qualifying criteria at National and International level.
3. Rules/Laws of Yoga and their Interpretation for competition.
4. Role of officials & their duties and responsibilities in yoga competition.

Suggested Reading:

- ❖ Tarak Nath Pramanik. (2018). Yoga Education. Sports Publication, New Delhi.
- ❖ Swami Vivekananda (2019). The Complete Book of Yoga : Karma Yoga, Bhakti Yoga, Raja Yoga, Jnana Yoga. Fingerprint Publishing.
- ❖ Sadhguru (2017). Adiyogi: The Source of Yoga. Harper Collins Publishers, India.
- ❖ Sadhguru (2017). Inner Engineering: A Yogi's Guide to Joy. Penguin Random House India.
- ❖ Swami Satyananda Saraswati (2013). Asana Pranayama Mudra Bandha. Bihar School of Yoga.
- ❖ B.K.S. Iyengar. (2012). Light on the Yoga Sutras of Patanjali. Harper Collins Publishers, India.
- ❖ Leslie Kaminoff & Amy Matthews. (2011). Yoga Anatomy. Human Kinetics.
- ❖ Muktibodhananda Swami. (1998). Hatha Yoga Pradipika. Bihar School of Yoga.
- ❖ Anatharaman, T.N. (1996). Ancient Yoga and Modern Science. Project of History of Indian Sciences Philosophy & Culture.
- ❖ Sturgess, Stephen. (1996). The Yoga Book. Watkins Publications, London, University of Michigan.
- ❖ Kumar, Dr. Kamakhya. (2008). Super Science of Yoga. Standard Publications, New Delhi.
- ❖ Jha, Gangadhar. (1894). Yoga Sara Samgraha. Bombay Theosophical Fund, Tatva Vivechaka Press, Bombay.

Criteria of Continuous Assessment (Total Marks: 50)

- Attainment of Specific Fitness -10 marks
- Execution of Technique: 15Marks
- Demonstration of Skill :15 Marks
- Marking and Measurements -10 marks

Criteria of Term End Assessment (Total Marks: 50)

- Demonstration of Skills and Techniques: 20 Marks
- Coaching and Officiating: 10 Marks
- Preparing Record of Practicals: 10 Marks
- Viva Voce: 10 Marks

L	T	P	Cr
0	0	2	1

Course Code: MPS 566**Course Title: Teaching Proficiency in Physical Education****Total Hours: 30****Learning outcomes:**

After completion of the course students will be able to

- To develop proficiency in taking teaching lesson of game & sports.
- Students will learn how to discuss about theory of sports and various skills of games with biomechanical principles.
- Students shall be provided sufficient training in selected discipline.
- To develop proficiency in taking theory lesson.

Content

The students of MPES III Semester need to develop proficiency in taking teaching lesson of Theory. Students will learn how to develop the competency in taking lesson and delivering content in class. In view of this, the students shall be provided sufficient teaching exposure. The duration of the lesson shall

be 45 minutes. Each student will take minimum 05 lessons and lesson will be supervised by concern faculty member.

Criteria of Continuous Assessment (Total Marks: 50)

- Five Theory Lesson - 50 marks

Criteria of Term End Assessment (Total Marks: 50)

- Final Theory Lesson - 50 Marks

Course Code: MPS 561

Course Title: Intramural Activities

L	T	P	Cr
0	0	2	1

Total Hours: 30

Learning outcomes:

After completion of the course students will be able to

- To develop proficiency in Sports & Games.
- To enable the students for acquiring relevant skills in various Sports & Games.
- To develop good judgment and fair play in competition.
- To enhance teamwork, and leadership skills.
- To enhance a social interaction through play within a diverse student body.

Content

The MPES– III Semester students need to participate in the intramural competition to nurture healthy competition, good judgment and fair play, teamwork, and leadership skills. The intramural competition allows students to participate in sport and physical activities without regard for high-performance skill or ability and enhance social interaction through play within a diverse student body and reduce student conflict by encouraging students to manage their emotions appropriately. It will promote a lifestyle of healthy habits through recreation and leisure activity involvement.

Criteria of Continuous Assessment (Total Marks: 50)

- Quality of Conducting Sports Competition – 20
- Preparation of Playing Area – 20 Marks
- Officiating – 10 Marks

Criteria of Term End Assessment (Total Marks: 50)

- Marking of any two Team Game Sports other than specialization -20 Marks
- Marking of any two Individual Sports other than specialization - 20 Marks
- Officiating of any two sports other than specialization - 10 Marks

IV Semester

Course Title: Dissertation
Course Code: MPS 600

L	T	P	Credits
0	0	32	16

Total Hours: 480

Learning Outcome

After completion of the course the students will be able to

- Conduct research independently in physical education and sport
- Develop analytical and logical thinking in the process of conducting research.
- Apply the implications of educational research in generating new knowledge

Content:

1. A candidate shall have dissertation for M.P.E.S. – IV Semester and synopsis for the same will be submitted in III semester.
2. Candidate give presentation for his/her research work before the research development committee.
3. Candidate will collect data and write all five chapters under the supervisor.
4. A candidate selecting dissertation must submit his/her dissertation not less than one week before the beginning of the IVth Semester Examination.

Evaluation Criteria:

Dissertation (Fourth Semester)		
	Marks	Evaluation
Supervisor	50	Continuous assessment (regularity in work, mid-term evaluation) dissertation report, presentation, final viva-voce
External expert, HOD and Senior-most Faculty of the Department	50	Dissertation report (30), presentation (10), final viva-voce (10)

Course Title: Internship
Code: MPS 591

L	T	P	Credits
0	0	8	4

Total Hours: 120

Learning outcomes

After completion of the course students will be able to

- Critically analyze the administrative activities of teacher education institutions.
- Learn and practice the process of sports activities assessment and intervention
- Practice innovative teaching techniques and evaluation in teacher education institutions

Content:

The MPES-IV Semester students need to attain an internship of 04 Weeks in School/colleges/universities in Bathinda city. It plays a crucial role in the professional development of students, and students will achieve valuable experience. It will also offer an opportunity to gain

relevant experience and get a realistic perspective on physical education. The supervisor will assign by the department and monitor the progress of candidates during the internship.

Evaluation Criteria:

Internship		
	Marks	Evaluation
Supervisor	50	Continuous Assessment
External expert, HoD and Senior-most Faculty of the Department	50	End Semester Assessment

Field Practical

L	T	P	Cr
0	0	4	2

Course Code: MPS 580

Course Title: Practical –VIII Throwing Events in Track & Field (Shot Put, Discus, Javelin & Hammer)

Total Hours: 60

Learning outcomes:

After completion of the course students will be able to

- Explain the rules & regulations of the Track & Field events.
- Recognize the importance of applied kinesiology and Sports Biomechanics in Track & Field events.
- Analyse the action of muscles used in the skill.
- To enable the students for acquiring relevant skills in Track & Field events.
- To develop skill proficiency in Track & Field events.
- To enable the students to perform at national and international level competitions.
- Perform the skills with proficiency
- Actively participate in Coaching aspects.
- Preparation for the Officiating & Conducting of the event.

Unit-I **15 hours**

- I. Fundamental of Throwing Events – Aims – Objectives and technical characteristics.
- II. Teaching of Throwing Technique – Javelin, shot – put – Discus-Hummer.

Unit-II **15 hours**

- I. History of throwing events World wide- Indian Athletes History.
- II. IAAF rules and ties breaking interpretations throwing events.

Unit-III **15 hours**

- I. Warming-up and cooling down Exercises for Various Jumping Events.
- II. IAAF rules and tie breaking interpretations Jumping events

Unit – IV **15 hours**

- I. Drills and Conditioning exercise for Throwing Events-Basic-Training Schedule Preparation

Suggested Reading:

1. Schneider, R. C. (2009). Ethics of Sport and Athletics: Theory, Issues, and Application. Wolters Kluwer Health/ Lippincott Williams & Wilkins.

2. Zeigler, E. F., & Spaeth, M. J. (1975). Administrative Theory and Practice in Physical Education and Athletics.
3. <https://www.worldathletics.org/about-iaaf/documents/book-of-rules>
4. <https://sportsauthorityofindia.nic.in/showimg.asp?ID=580>

Criteria of Continuous Assessment (Total Marks: 50)

- Attainment of Specific Fitness -10 marks
- Execution of Technique: 15Marks
- Demonstration of Skill :15 Marks
- Marking and Measurements -10 marks

Criteria of Term End Assessment (Total Marks: 50)

- Demonstration of Skills and Techniques: 20 Marks
- Coaching and Officiating: 10 Marks
- Preparing Record of Practicals: 10 Marks
- Viva Voce: 10 Marks

Sports Specialization-II

Course Code: MPS 581

Course Title: Sports Specialization-II (Badminton, Basketball, Cricket, Football, Handball, Hockey, Judo, Kabaddi, Table Tennis, Tennis, Volleyball, Weight Lifting, Yoga –Select Only One)

L	T	P	Cr
0	0	6	3

Total Hours: 90

Learning outcomes:

After completion of the course students will be able to

- Explain the rules & regulations of the game.
- Recognize the importance of applied kinesiology and Sports Biomechanics in various games.
- To develop mastery on training sessions
- To develop skill proficiency
- Actively participate in coaching aspects.
- To develop proficiency in Officiating & Conducting of the game.
- To develop critical understanding of application of strategies, tactics during teaching, coaching, competitions.

Sports Theory II : Badminton

UNIT-I

Talent Identification and Development

1. Detection of talent in badminton
2. Development of talent in badminton
3. Planning and Periodization in badminton

Techniques & their application

1. Classification & analysis of technique -Various faults in skills, their causes and corrections, types of exercises to develop and consolidate fundamental skills of the badminton
2. Teaching stages of techniques
3. Evaluation of techniques.

UNIT-II

Tactics & their Application

1. Philosophy of coaching applied in badminton
2. Meaning, Aims & Objectives of technical and tactical training.
3. Developing basic strategy, singles, doubles and mixed doubles strategies (Offensive and Defensive).
4. Requisite of Badminton Player (Physical, Technical, Psychological).
5. Mechanical Analysis of Technical Skills.
6. Relationship between tactics and strategy
7. Team building (On and off court).

REFERENCES

- ❖ Downey, J. C., & Brodie, D. (1980). Get Fit for Badminton: A Practical Guide to Training for Players and Coaches. Pelham Books.
- ❖ Downey, Jake (1993). Winning Badminton Doubles How to coach Badminton. Published by Jake Downey.
- ❖ Downey, Jake (1982). Better Badminton for All. Pelham Books .
- ❖ Downey, Jake (1993). Excelling at Badminton (Beyond the Basics). Teach Yourself Books.
- ❖ Downey, Jake (2007). Tactics in Badminton Singles. e-book.
- ❖ Grice (2007). Badminton Steps to Success (2nd Edition). Human Kinetics.
- ❖ John Edwards (1997). Badminton: Technique, Tactics, Training (Crowood Sports Guides).The Crowood Press Ltd.
- ❖ Mark Golds (2002). Badminton (Series - Skills of the Game).The Crowood Press Ltd.

Sports Theory II: Basketball

UNIT-I

Talent Identification and Development

1. Detection of talent in basketball
2. Development of talent in basketball
3. Planning and Periodization in basketball

Techniques & their application

1. Classification & analysis of technique -Various faults in skills, their causes and corrections, types of exercises to develop and consolidate fundamental skills of the game
2. Teaching stages of techniques
3. Evaluation of techniques.

UNIT-II

Tactics & their Application

1. Philosophy of coaching applied in basketball
2. Meaning, Aims & Objectives of Tactics and Strategy.
3. Offensive Tactics (individual and team).
4. Defensive Tactics (individual and team).
5. Methods of Tactical training (break up drills).
6. Relationship between tactics and strategy
7. Team conflicts (How to identify conflict and solve it).
8. Team building (On and off court).

REFERENCES

- ❖ OBE, F. W. D. (2014). Sports Training Principles: An Introduction to Sports Science. Bloomsbury Publishing.
- ❖ Geyer, D. (1977). Full Court Control Basketball: A Flexible Offense to Exploit Opponents' Weaknesses. Parker Publishing Company.
- ❖ Allen, A. P. (1959). Handbook of Baseball Drills. Prentice-Hall.

- ❖ McGuire Frank. (1959). Defensive basketball. Prentice-Hall, Inc. New York.
- ❖ Kanika K. (2001). Basketball Coaching Manual. Sports Publication.
- ❖ Vaidhya & Rajesh. (2007). Skills & Tactics Basketball. Sports Publication. New Delhi.
- ❖ Boe, Clair and Norton (1959). Men to Men Defense and Attack. New York: Ronald Press Company.

Sports Theory II: Cricket

UNIT-I

Talent Identification and Development

1. Detection of talent in cricket
2. Development of talent in cricket
3. Planning and Periodization in cricket

Techniques & their application

1. Classification of techniques regarding batting.
2. Teaching stages of techniques for bowlers.
3. Faults and their corrections during batting skills, bowling skills and fielding.
4. Biomechanical and Anthropometrical analysis of various techniques:
 - a. Front foot drives
 - b. Back foot drives
 - c. Horizontal strokes
 - d. Bowling

UNIT-II

Tactics in Cricket:

1. Tactics for one day matches.
2. Tactics for test matches.
3. Tactics for T20 matches.
4. Offensive and defensive fielding tactics.

REFERENCES

- ❖ Aneja, O.P. (2012). How to Play Cricket. Prerna Prakashan.
- ❖ Arora & Monika. (2005). Cricket Coaching Manual. Sports Publication.
- ❖ Bharadwaj & Arun. (2008). Coaching Batting Skills. Royal Colour Cartons.
- ❖ Kutty Suresh. (2003). Fielding Drills in Cricket. Sports Publication.
- ❖ Rachna. (2001). Play Better Cricket. Sports Publication.
- ❖ Srivastava, A.K. (2006). How to Coach Bowling. Sports Publication.
- ❖ Srivastava, Vijay Kumar. (2007). Analysis of Cricket Skills. Sports Publication.
- ❖ Syal, Meenu. (2004). Teach Yourself Cricket. Prerna Prakashan.
- ❖ Tyagi, Arun Kumar. (2012). Cricket Skills & Rules. Khel Sahitya Kendra.
- ❖ Woolmer, Bob. (2009). The Art and Science of Cricket. Firefly Book Limited.

Sports Theory II: Football

UNIT-I

Talent Identification and Development

1. Detection of talent in football
2. Development of talent in football
3. Planning and Periodization in football

Techniques & their application

1. Classification & analysis of technique -Various faults in skills, their causes and corrections, types of exercises to develop and consolidate fundamental skills of the game
2. Teaching stages of techniques
3. Evaluation of techniques.

UNIT-II

Tactics & their Application

1. Philosophy of coaching applied in football
2. Meaning, Aims & Objectives of Tactics and Strategy.
3. General and applied tactics and their implication :
 - I. Individual : Attack & Defence.
 - II. Group: Attack & Defence.
4. Methods of Tactical training (break up drills).
5. Relationship between tactics and strategy
6. Team conflicts (How to identify conflict and solve it).
7. Leagues and competitions.
8. Emphasizing the importance of set play from the point of view of attack and defence in soccer.

REFERENCES

- ❖ Wade, A. (1967). The FA-guide to training and coaching. London: The Football Association.
- ❖ Csanádi, Á. (1972). Soccer: Technique-tactics-coaching. Corvina Press.
- ❖ Beswick, B. (2010). Focused for soccer (Vol. 9, p. 12). Champaign, IL: Human Kinetics.
- ❖ Bobby Moffat .(1985). The Basic Soccer Guide. Collier Books.
- ❖ Reilly, T. (2003). Motion analysis and physiological demands. Science and soccer, 2, 59-72.

Sports Theory II: Handball

UNIT-I

Talent Identification and Development

1. Detection of talent in Handball
2. Development of talent in Handball
3. Planning and Periodization in Handball

Techniques & their application

1. Classification & analysis of technique -Various faults in skills, their causes and corrections, types of exercises to develop and consolidate fundamental skills of the game
2. Teaching stages of techniques
3. Evaluation of techniques.

UNIT-II

Tactics & their Application

1. Philosophy of coaching applied in Handball
2. Meaning, Aims & Objectives of Tactics and Strategy.
3. Offensive Tactics (individual and team).
4. Defensive Tactics (individual and team).
5. Methods of Tactical training (break up drills).
6. Relationship between tactics and strategy
7. Team conflicts (How to identify conflict and solve it).
8. Team building (On and off court).

References:

- ❖ Clanton, R. E., & Dwight, M. P. (1996). Team handball: Steps to success. Human Kinetics.
- ❖ Nikola Radice & Mitjallc. (2013). Handball : from beginner to top player. Self-publishing N. Radic Publisher.

- ❖ Baha M. Hamil & James D. LaPoint (1994). Team Handball: Skills, Strategies and Training. Eddie Bowers Publishing Company.
- ❖ Bernath E. Phillips .(2013). Fundamental Handball. Literary Licensing publisher.

Sports Theory II: Hockey

UNIT-I

Talent Identification and Development

1. Detection of talent in Hockey
2. Development of talent in Hockey
3. Planning and Periodization in Hockey

Techniques & their application

1. Classification & analysis of technique -Various faults in skills, their causes and corrections, types of exercises to develop and consolidate fundamental skills of the game
2. Teaching stages of techniques
3. Evaluation of techniques.

UNIT-II

Tactics & their Application

1. Philosophy of coaching applied in Hockey
2. Meaning, Aims & Objectives of Tactics and Strategy.
3. Offensive strategy: Organisation (forwards, midfielders, back); Communication (nonverbal communication); Timing, Moving with the ball; Cutting; Offensive penalty corner (variations).
4. Defensive strategy: Communication; Marking (ball side / goal side); 16 Yard hits; Defensive penalty corners. Methods of Tactical training (break up drills).
5. Relationship between tactics and strategy
6. Team conflicts (How to identify conflict and solve it).
7. Team building (On and off court).

REFERENCES

- ❖ Dilip K. Dureha & Akhil Mehrotra (2003). Teaching and Coaching Hockey. Janvani Prakashan (P) Ltd.
- ❖ Flint, R. H. (1976). Women's Hockey. Pelham Books.
- ❖ Taylor, I. C., & Vear, D. (1988). Taylor on Hockey. MacDonald, Queen Anne Press.
- ❖ Narang, P. (2003). Play and Learn Hockey. Pinnacle Technology.
- ❖ Singh, Gian and Wallia Kuku. (1979). Learn Hockey this way. Commercial Publication Bureau, New Delhi.
- ❖ Wein, H. (1979). The science of hockey. (D. Belchamber, Trans.).

Sports Theory II : Judo

UNIT-I

Talent Identification and Development

1. Detection of talent in Judo
2. Development of talent in Judo
3. Planning and Periodization in Judo

Techniques & their application

1. Classification & analysis of technique -Various faults in skills, their causes and corrections, types of exercises to develop and consolidate fundamental skills of the Judo
2. Teaching stages of techniques
3. Evaluation of techniques.

UNIT-II

Tactics & their Application

1. Philosophy of coaching applied in Judo
2. Meaning, Aims & Objectives of technical and tactical training.
3. Developing basic strategy (Offensive and Defensive).
4. Requisite of Judo Player (Physical, Technical, Psychological).
5. Mechanical Analysis of Technical Skills.
6. Relationship between tactics and strategy
7. Team building

References:

- ❖ Hill, Robert. (2010). World of Martial Arts. 128 Valley Ln London, Kentucky: LuLu Publishing.
- ❖ Kashiwazaki, Katsuhiko. (1992). Shimewaza, Judo Masterclass Techniques. London: Ippon Books.
- ❖ Kashiwazaki, Katsuhiko. (1997). Osaekomi, Judo Masterclass Techniques. London: Ippon Books.
- ❖ Toshiro Daigo. (2016). Kodokan Judo Throwing Techniques. Kodansha International; Reprint edition.
- ❖ Steve Scott. (2019). The Judo Advantage. YMAA Publication Center.

Sports Theory II: Kabaddi

UNIT-I

Talent Identification and Development

1. Detection of talent in Kabaddi
2. Development of talent in Kabaddi
3. Planning and Periodization in Kabaddi

Techniques & their application

1. Classification & analysis of technique -Various faults in skills, their causes and corrections, types of exercises to develop and consolidate fundamental skills of the game
2. Teaching stages of techniques
3. Evaluation of techniques.

UNIT-II

Tactics & their Application

1. Philosophy of coaching applied in Kabaddi
2. Meaning, Aims & Objectives of Tactics and Strategy.
3. Offensive Tactics (individual and team).
4. Defensive Tactics (individual and team).
5. Methods of Tactical training (break up drills).
6. Relationship between tactics and strategy
7. Team conflicts (How to identify conflict and solve it).
8. Team building (On and off court).

REFERENCES:

- ❖ S. Muniraju. (2015). A Text Book on Kabaddi: Kabaddi, Skills Techniques and Strategies. Lap Lambert Academic Publishing.
- ❖ E. Prasad Rao. (2002). Kabaddi- the complete hand book. Jagadamba Publications, Vizianagaram, A.P.

Sports Theory II : Table Tennis

UNIT-I

Talent Identification and Development

1. Detection of talent in Table Tennis

2. Development of talent in Table Tennis
3. Planning and Periodization in Table Tennis

Techniques & their application

1. Advance Technique/Skill- Footwork, Service Variations, Drive Variations, Flick, Smash & their Developmental Drills.
2. Situational Play.
3. Recreational and lead-up activities : Round Toss, Bench Table Tennis, Frog Table Tennis, Splat Table Tennis. Teaching stages of techniques

UNIT-II

Tactics & their Application

1. Philosophy of coaching applied in Table Tennis
2. Meaning, Aims & Objectives of technical and tactical training.
3. Developing basic strategy (Offensive and Defensive).
4. Requisite of Table Tennis Player (Physical, Technical, Psychological).
5. Mechanical Analysis of Technical Skills.
6. Relationship between tactics and strategy
7. Team building

REFERENCES

- ❖ Bose, Tapan and Mukherjee, Bhawani. (2000). Table Tennis Training Manual. (Phulkian Press Pvt. Ltd., SAI, NSNIS, Patiala, India.
- ❖ Fairholm, David. (1985). The Pocket Guide to Table-Tennis Tactics. Bell and Hyman Denmark House 37/39, Queen Elizabeth Street, London.
- ❖ Hodges, L. (1993). Table tennis: steps to success. Human Kinetics 1.
- ❖ Sklorz, Martin. (1973). Table Tennis. John Blackburn Ltd.

Sports Theory II : Tennis

UNIT-I

Talent Identification and Development

1. Detection of talent in Tennis
2. Development of talent in Tennis
3. Planning and Periodization in Tennis

Techniques & their application

1. Advance Technique/Skill- Footwork, Service Variations, Drive Variations, Flick, Smash, five game situation& their Developmental Drills.
2. Situational Play.
3. Recreational and lead-up activities : Sky Ball, Flying Target, Double Tennis, No Ad Game, Up & down, Tag Team Tennis, Stop Tennis, Rally Ball, Team Cones, Floor Tennis

UNIT-II

Tactics & their Application

1. Philosophy of coaching applied in Tennis
2. Meaning, Aims & Objectives of technical and tactical training.
3. Developing basic strategy (Offensive and Defensive).
4. Requisite of Tennis Player (Physical, Technical, Psychological).
5. Mechanical Analysis of Technical Skills.
6. Relationship between tactics and strategy
7. Team building

REFERENCES:

- ❖ Braden, V. and Bruns, B., (1998). Tennis 2000: Strokes, Strategy and Psychology for a Lifetime. 1st ed. New York: Little, Brown and Company.
- ❖ Groppe, J., (1992). High tech tennis. 1st ed. Champaign, Ill.: Leisure Press.
- ❖ Hoskins, T., (2003). The Tennis Drill Book. 1st Ed. Champaign, Ill.: Human Kinetics.
- ❖ Knudson, D., (2006). Biomechanical Principles of Tennis Technique. 1st ed. Vista: USRSA.
- ❖ Rowland, T., (2014). Tennisology. 1st ed. Champaign: Human Kinetics.
- ❖ Steve Beier (2009). More Than a Game: Learning Life Skills from Tennis Skills Paperback – Import. Author House Publisher.

Sports Theory II: Volleyball

UNIT-I

Talent Identification and Development

1. Detection of talent in Volleyball
2. Development of talent in Volleyball
3. Planning and Periodization in Volleyball

Techniques & their application

1. Classification & analysis of technique -Various faults in skills, their causes and corrections, types of exercises to develop and consolidate fundamental skills of the game
2. Teaching stages of techniques
3. Evaluation of techniques.
4. Selection of team and starting line-up for Volleyball game.

UNIT-II

Tactics & their Application

1. Philosophy of coaching applied in Volleyball
2. Meaning, Aims & Objectives of Tactics and Strategy.
3. Methods of Tactical training (break up drills).
4. Relationship between tactics and strategy
5. Playing system (offensive and defensive) :
 - I. 3-Men reception.
 - II. 2-Men reception.
 - III. 2-1-3, 2-0-4 and 3-0-3 defensive system.
6. Team conflicts (How to identify conflict and solve it).
7. Different teaching and coaching aids/gadgets of Volleyball.

REFERENCES

- ❖ Anthony C. Varghese & Lawrence V. (2009). Volleyball Player. Handbook Friends Publication, New Delhi.
- ❖ Dumphy Mary & Wilde Rad. (2000). Volleyball Today (2nd Edition). Fritz/Brett.
- ❖ Ranganathan P.P. (2003). Volleyball, A Guide to Playing and Coaching. Friends Publication, Delhi.
- ❖ Resser C. Jonathan & Bohr Roald. (2003). Volleyball. Blockwell.
- ❖ Sagar S.K. (2001). Play Better Volleyball. Sports Publication, Delhi.
- ❖ Soudhu S. Gurbaksh. (1982). Volleyball Basic and Advanced. Sports People, Chandigarh.
- ❖ American Sport Education Program. (2007). Coaching Youth Volleyball. Human Kinetics.
- ❖ Wise, M. (1999). Volleyball drills for champions. Human Kinetics.

Sports Theory II : Weight Lifting

UNIT-I

Talent Identification and Development

1. Detection of talent in weightlifting
2. Development of talent in weightlifting
3. Planning and Periodization in weightlifting

Techniques & their application

1. Classification & analysis of technique -Various faults in skills, their causes and corrections, types of exercises to develop and consolidate fundamental skills of the weightlifting
2. Teaching stages of techniques
3. Evaluation of techniques.

UNIT-II

Tactics & their Application

- I. Philosophy of coaching applied in weightlifting
- II. Meaning, Aims & Objectives of technical and tactical training.
- III. Requisite of weightlifting Player (Physical, Technical, Psychological).
- IV. Mechanical Analysis of Technical Skills.

Development of motor qualities

- I. Strength and speed.
- II. Training load and adaptation & relationship between means, load and recovery, judgment of training load- objective.
- III. Principles of Training

Orientation and Working on fitness centre equipments/ Gadgets :

- I. Cardiac machines.
- II. Strength training machines.
- III. Swiss ball, terra bands etc.
- IV. Sauna& steam bath, Jacuzzi, chilled shower, etc.

REFERENCE

- ❖ Hand Book of International Weight Lifting Federation. Published by the International Weight Lifting Federation, Budapest – Hungary 2005-08.
- ❖ Singh Hardayal (1995). Science of Sports Training” D.V.S. Publication Giri Nagar, Kalki.
- ❖ Vella Mark (2007). Anatomy for Strength and Fitness Training: An Illustrated Guide to your muscles in Action, New Holland Publishers Ltd.
- ❖ Joe Kenn (2003). Coach's Strength Training. Coaches Choice Publisher .
- ❖ Mohamed F. El-Hewie (2006).Essentials of Weightlifting and Strength Training Hardcover. Shaymaa Publishing Corporation.
- ❖ Greg Everett (2016). Olympic Weightlifting: A Complete Guide for Athletes & Coaches. Catalyst Athletics, LLC
- ❖ Bob Takano (2012). Weightlifting Programming: A Winning Coach's Guide. Catalyst Athletics, LLC

Sports Theory II : Yoga

Unit- I

1. Concept of PanchaMahabhuta, PanchKosh, PanchPrana, Chakras and Aura in Yoga
2. Concept of Triguna And Tridosha in Yoga
3. Yogic lifestyle (Ahara, Vihar, Achar, Vichar)
4. Shatkarma: Meaning, Types (Dhauti, Basti, Neti, Trataka&Kapalbhati) techniques, Precautions and Benefits.
5. Asanas&Pranayama: Meaning, Definitions, Types, Techniques, Precautions and benefits.
6. Mudras &Bandas: Meaning, Technique, Precautions and Benefits.
7. Meditation: Meaning, techniques and benefits of meditation.

Unit- II

1. Requisite of professional yoga practitioner (Physical, Technical, Psychological).
2. Teaching/ Training in Yoga: Means & methods, basic teaching aids and Advanced training gadgets
3. Planning and Periodization in Yoga
4. Evaluation of learning & performing techniques & tactics (in training & competition).
5. Mechanical Analysis of Technical Skills in Yoga.

References:

- ❖ Tarak Nath Pramanik. (2018). Yoga Education. Sports Publication, New Delhi.
- ❖ Swami Vivekananda (2019). The Complete Book of Yoga : Karma Yoga, Bhakti Yoga, Raja Yoga, Jnana Yoga. Fingerprint Publishing.
- ❖ Sadhguru (2017). Adiyogi: The Source of Yoga. Harper Collins Publishers, India.
- ❖ Sadhguru (2017). Inner Engineering: A Yogi's Guide to Joy. Penguin Random House India.
- ❖ Swami Satyananda Saraswati (2013). Asana Pranayama Mudra Bandha. Bihar School of Yoga.
- ❖ B.K.S. Iyengar. (2012). Light on the Yoga Sutras of Patanjali. Harper Collins Publishers, India.
- ❖ Leslie Kaminoff & Amy Matthews. (2011). Yoga Anatomy. Human Kinetics.
- ❖ Muktibodhananda Swami. (1998). Hatha Yoga Pradipika. Bihar School of Yoga.
- ❖ Anatharaman, T.N. (1996). Ancient Yoga and Modern Science. Project of History of Indian Sciences Philosophy & Culture.
- ❖ Sturgess, Stephen. (1996). The Yoga Book. Watkins Publications, London, University of Michigan.
- ❖ Kumar, Dr. Kamakhya. (2008). Super Science of Yoga. Standard Publications, New Delhi.
- ❖ Jha, Gangadhar. (1894). Yoga Sara Samgraha. Bombay Theosophical Fund, Tatva Vivechaka Press, Bombay.

Criteria of Continuous Assessment (Total Marks: 50)

- Attainment of Specific Fitness -10 marks
- Execution of Technique: 15Marks
- Demonstration of Skill :15 Marks
- Marking and Measurements -10 marks

Criteria of Term End Assessment (Total Marks: 50)

- Demonstration of Skills and Techniques: 20 Marks
- Coaching and Officiating: 10 Marks
- Preparing Record of Practicals: 10 Marks
- Viva Voce: 10 Marks

Course Code: MPS 582

Course Title: Coaching Proficiency in Physical Education & Sports (As per their Sports Specialization)

L	T	P	Cr
0	0	2	1

Total Hours: 30

Learning outcomes:

After completion of the course students will be able to

- To develop proficiency in taking teaching lesson of game & sports.
- Students will learn how to discuss about theory of sports and various skills of games with biomechanical principles.
- Students shall be provided sufficient training in selected discipline.
- To develop proficiency in taking coaching lesson.
- Demonstration of skills of specialized sport.

Content

The students of MPES IV Semester need to develop proficiency in taking coaching lesson of game& sports. Students will learn how to discuss about various skills of games with biomechanical principles. In view of this, the students shall be provided sufficient training in selected discipline. The duration of the lesson shall be 45 minutes. Each student will take 05 lessons and lesson will be supervised by concern faculty member.

Criteria of Continuous Assessment (Total Marks: 50)

- Five Theory Lesson - 50 marks

Criteria of Term End Assessment (Total Marks: 50)

- Final Theory Lesson - 50 Marks

Course Code: MPS 579

Course Title: Intramural Activities

L	T	P	Cr
0	0	2	1

Total Hours: 30

Learning outcomes:

After completion of the course students will be able to

- To develop proficiency in Sports & Games.
- To enable the students for acquiring relevant skills in various Sports & Games.
- To develop good judgment and fair play in competition.
- To enhance teamwork, and leadership skills.
- To enhance a social interaction through play within a diverse student body.

Content

The MPES– IV Semester students need to participate in the intramural competition to nurture healthy competition, good judgment and fair play, teamwork, and leadership skills. The intramural competition allows students to participate in sport and physical activities without regard for high performance skill or ability and enhance social interaction through play within a diverse student body and reduce student conflict by encouraging students to manage their emotions appropriately. It will promote a lifestyle of healthy habits through recreation and leisure activity involvement and makes them technically and tactically efficient in respective sports.

Criteria of Continuous Assessment (Total Marks: 50)

- Quality of Conducting Sports Competition – 20
- Preparation of Playing Area – 20 Marks
- Officiating – 10 Marks

Criteria of Term End Assessment (Total Marks: 50)

- Marking of any two Team Game Sports other than specialization -20 Marks
- Marking of any two Individual Sports other than specialization - 20 Marks
- Officiating of any two sports other than specialization - 10 Marks