VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY

JNANASAGARA CAMPUS, BALLARI-583105

DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS SCIENCES

(Two Years Program)

SYLLUBUS OF

MASTER OF PHYSICAL EDUCATION (M.P.ED)

Effective From

2024-25

VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY

JNANASAGARA CAMPUS, BALLARI-583105

Department of Physical Education and Sports Sciences

Preamble: Department of Physical Education and Sports Sciences was established in the year 2019 to promote physical education and develop an interest among people regarding the need and importance sports and exercise which is medium to improve the community health. The syllabi of the courses are so designed as to prepare professionally qualified leaders and teachers in physical education. A team of competent and dedicated teachers are engaged in relentless pursuit of excellence in Physical Education and Sports for health, fitness and wellness of the citizens. The Master of Physical Education (M.P.Ed.) course were started during 2019 with an intake of 40 seats as per the guidelines of the National Council of Teacher Education (N.C.T.E.).

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

Programme Overview: The Master of Physical Education (M.P.Ed.) two year (Four Semesters - Choice Based Credit System) programme is a professional programme meant for preparing Physical Education Teachers for senior secondary (Class XI and XII) level as well as Assistant Professor/Directors/Sports Officers in Colleges/Universities and Teacher Educators in College of Physical Education.The M.P.Ed. programme is designed to integrate the study of childhood, social context of Physical Education, subject knowledge, pedagogical knowledge, aim of Physical Education and communication skills. The programme comprises of compulsory and optional theory as well as practical courses and compulsory school internship in School/Colleges/Sports Organizations/Sports Academy/Sports Club.

Duration: 2 Years (4 semesters) Programme Code:MPES

Programme Educational Objectives (PEOs):

After 2 years of completion of the programme the graduates will be able to:

1. Professional Competency: To provide knowledge of professionalism and to teach effective and efficient skills and competencies to prepare professionally qualified teachers in physical education for secondary school education/higher education.
2. Personal Transformation: To cultivate the spirit of sportsmanship, mental and physical alertness, scientific temper and optimism; and to change the behaviour, attitude and values of teacher trainees so

that they shape into responsible and accountable agents of change in the society, in diverse perspective of concerns and issues vital for human survival, progress and development.

3. Preparation for Placement: To prepare qualified professionals of physical education who would be ready for placement as teachers in schools/colleges, and as fitness instructors in fitness centers, coaching centers, clubs and gyms.
4. Higher Education: To lay down a sound foundation for higher and advance studies in physical education, coaching and sports sciences.
5. Diverse Leadership: To transform the students as competent leaders with essential organizational, managerial and administrative skills for diverse leadership to apply in the field settings.
6. Creative Learning Environment: To inculcate in the students' skills, abilities and competencies to create learning environments for all children
7. Value and Ethical Skills: To provide knowledge and experiences needed to exhibit effective skills of value and ethics of the teaching domain.

Programme Outcomes (POs):

At the end of the programme the students will be able to:

1. Contextualize physical education with a set of attitudes and values that signify the importance of movement as a valued human practice.
2. Qualify for teaching at secondary school, college and University level as experts in various fitness industry such as clubs, fitness centers and gyms.
3. Transform themselves into competent teachers with latest domain knowledge and brilliant pedagogical skills.
4. Promote the learning of new skills, enhance, extend, inform and critique the deliberate use of exercise, play, sport and other forms of physical activity within the individual and societal context.
5. Acquire organizational and management skills necessary in sports settings and in general educational context.
6. Communicate effectively on the complex pedagogical activities with the teaching community, sports team and society at large; and be able to instruct and train teams to perform well.
7. Perform effectively as an individual, as a member and as a leader in diverse team and multidisciplinary setting.
8. Make a unique contribution to balanced development and living emphasizing learning focused on movement. Fostering a pedagogy based around critical thought and action.
9. Become an active player in the modern educational system.
10. Apply appropriate techniques, resources and modern tools to make teaching effective.
11. Apply ethical principles to become a competent teacher.

VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY, BALLARI

Distribution of Courses/Papers in Postgraduate Programme as per Choice Based Credit System (CBCS) Proposed for

PG Program in Physical Education

M.P.Ed I - SEMESTER

Semester No.	Category	Subject code	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of exams (Hrs)
				IA	Sem. Exam	Total	L	T	P		
FIRST	DSC1	24PES1C1L/P	Scientific Principles of Sports Training	30	70	100	3	-	2	4	3
	DSC2	24PES1C2L	Exercise Physiology	30	70	100	4	-	-	4	3
	DSC3	24PES1C3L	Yogic Sciences	30	70	100	4	-	-	4	3
	DSC4	24PES1C4L	Research Process in Physical Education & Sports Sciences	30	70	100	4	-	-	4	3
	SEC1	24PES1S1P	**Mass demonstration:** Drill and marching, ceremonial parade.	20	30	50	-		4	2	2
	DSCP	24PES1C1P	**Practical Lab:** Physiology of Exercise.	20	30	50	-	-	4	2	2
	DSCP	24PES1C2P	**Field Activity Practical:** 1. Athletics- Running Events, 2. Yoga, 3. Aerobics 4. Judo (Any two)	20	30	50	-	-	4	2	2
	DSCP	24PES1C3P	**Field Activity Practical**:1. Kabaddi, 2. Basketball, 3. Swimming and 4.Wrestling/Gymnastics (any two)	20	30	50			4	2	2
Total Marks for I Semester						**600**				**24**	

II-SEMESTER

Semester No.	Category	Subject code	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of exams (Hrs)
				IA	Sem. Exam	Total	L	T	P		
SECOND	DSC5	24PES2C5L	Sports Bio-Mechanics and Kinesiology	30	70	100	4	-	-	4	3
	DSC6	24PES2C6L/P	Test, Measurement and Evaluation in Physical Education	30	70	100	3	-	2	4	3
	DSC7	24PES2C7L	Applied Statistics in Physical Education and Sports	30	70	100	4	-	-	4	3
	DSC8	24PES2C8L	Sports Management and Curriculum design in Physical Education	30	70	100	4	-	-	4	3
	SEC2	24PES2S2P	Adventures sports & Recreational Games	20	30	50	-		4	2	2
	DSCP	24PES2C4P	**Practical Lab:** Biomechanics & Kinesiology.	20	30	50	-	-	4	2	2
	DSCP	24PES2C5P	**Field Activity Practical:** 1. Athletics-Throwing's & Jumping Events 2. Kho-Kho 3. Handball 4. Football (Any two)	20	30	50	-	-	4	2	2
	DSCP	24PES2C6P	**Field Activity Practical**: Coaching lesson of Games and Sports.	20	30	50			4	2	2
Total Marks for II Semester						**600**				**24**	

III-SEMESTER

Semester No.	Category	Subject code	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of exams (Hrs)
				IA	Sem. Exam	Total	L	T	P		
THIRD	DSC9	24PES3C9L	Sports psychology and sociology	30	70	100	4	-	-	4	3
	DSC10	24PES3C10L	Athletic care and rehabilitation	30	70	100	4	-	-	4	3
	DSE1	24PES3E1L	1.Educational Technology in Physical Education. 2. Physical Fitness and Wellness 3. Women in Sports	30	70	100	4	-	-	4	3
	DSE2	24PES3E2L/P	1.Value & Environmental Education 2. Sports Engineering 3. Leadership training camp	30	70	100	3	-	2	4	3
	GEC1	24PES3G1L/P	1.Yoga and Aerobics 2. Physical Fitness and Wellness. 3. Martial Arts and Combative Sports	20	30	50	1	-	2	2	2
	SEC3	24PES3S3P	**Internship**	20	30	50			4	2	2
	DSCP	24PES3C7P	**Practical Lab:** Sports Psychology	20	30	50	-	-	4	2	2
	DSCP	24PES3C8P	**Field Activities Practical**:1. Hockey 2. Volleyball 3. Throwball 4. Karate (Any two)	20	30	50	-	-	4	2	2
Total Marks for III Semester						**600**				**24**	

IV-SEMESTER

Semester No.	Category	Subject code	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of exams (Hrs)
				IA	Sem. Exam	Total	L	T	P		
FOURTH	DSC11	24PES4C11L	Sports Medicine,	30	70	100	4	-	-	4	3
	DSC12	24PES4C12L	Health Education and Sports Nutrition	30	70	100	4	-	-	4	3
	DSE3	24PES4E3L	1.Sports Journalism and Mass media 2. Theories of Games and Sports 3. Sports Injuries, First Aid and Cure.	30	70	100	4	-	-	4	3
	DSE4	24PES4E4L/P	1.Sports Technology 2. Physiotherapy and Therapeutic Exercise 3.Adapted Physical Education	30	70	100	3	-	2	4	3
	GEC2	24PES4G2L	1. Health Education, 2. Yoga for daily life. 3. Indigenous and Folk games	20	30	50	2	-	-	2	2
	DSCP	24PES4C9P	**Field Activities Practical:** 1. Badminton 2. Table Tennis 3. Netball & 4. Cricket (any two)	20	30	50	-	-	4	2	2
	Project	21PES4C1R	Research Project	40	60	100	4	-	-	4	3
Total Marks for IV Semester						**600**				**24**	

(I-IV semester)- Total Marks: 2400 Total credits: 96

Note: Course = paper; L= Lecture; T= Tutorial; P=Practical; DSC= Discipline Specific Core Course; DSE= Discipline Specific Elective; SEC= Skill Enhancement Course; GEC1 = General Elective Course to be taken from within Faculty from other department, GEC2= General Elective Course to be taken outside Faculty.

A credit is a unit of study of a fixed duration. For the purpose of computation of workload as per UGC norms the following is mechanism be adopted in the university: One credit (01) = One Theory Lecture (L) period of one hour; One credit (01) = One Tutorial (T) period of one hour; One credit (01) = One practical (P) period of two hours.

A Tutorial is supplementary practice to any teaching –learning process that may consist of participatory discussion/self study, desk work, seminar presentations by students and such other novel methods that help a student to absorb and assimilate more effectively the contents delivered in the Lecture Sessions/ Class, Seminars, Case study, Discussion Session etc.

Subject Code Description:

21 – Year of Establishment
PES – Program Code
1/2/3/4 – Semester
C1/S1/G1/E1 – Course subject 1/SEC1/GEC1/DSE1
L – Lecture
T – Tutorial
P –Practical
R – Research Project

First Semester M.P.Ed

Course: Scientific Principles of Sports Training	**Course Code:** 24PES1C1L/P
Teaching Hours/Week (L-T-P): 3 - 0 - 2	**No. of Credits:** 04
Internal Assessment: 30 Marks	**Semester End Examination:** 70 Marks

Course Objectives:

1. To provide knowledge and concept of sports training.
2. To develop an understanding of the technical and tactical training.
3. To provide the role of s port sciences to achieve the excellence

Course Outcomes (CO): After completion of this course student should able to

1. Understand training as performance-based science
2. Explain different means and methods of various training
3. Prepare training schedule for various sports and games
4. Appraise types of periodization for performance development
5. Create various training facilities and plans for novice to advance performers.

Unit 1: Differential equations and Special functions **11**

Hours

Sports training: Definition – Aim, Characteristics, Principles of Sports Training, Over Load: Definition, Causes of Over Load, Symptoms of Overload, Remedial Measures – Super Compensation – Altitude Training – Cross Training.

Unit 2: Components of Physical Fitness **11**

Hours

Strength: Methods to improve Strength: Weight Training, Isometric, Isotonic, And Circuit Training, Speed: Methods to Develop Speed: Repetition Method, Downhill Run, Parachute Running, Wind Sprints, Endurance, Methods to Improve Endurance: Continuous Method, Interval Method, Repetition Method, Cross Country, Fartlek Training.

Unit 3: Flexibility **11**

Hours

Flexibility: Methods to Improve the Flexibility- Stretch and Hold Method, Ballistic Method, Special Type Training: Plyometric Training. Training for Coordinative abilities: Methods to Improve Coordinative abilities: Sensory Method, Variation in Movement Execution Method, Variation in External Condition Method, Combination of Movement Method, Types of Stretching Exercises.

Unit 4: Training Plan **11**

Hours

Training Plan: Macro Cycle, Meso-Cycle. Short Term Plan and Long-Term Plans - Periodization: Meaning, Single, Double and Multiple Periodization, Preparatory Period, Competition Period and Transition Period.

Unit 5: – Doping **11**

Hours

Definition of Doping – Side effects of drugs – Dietary supplements – IOC list of doping classes and methods. Blood Doping – The use of erythropoietin in blood boosting – Blood doping control – The testing programmes – Problems in drug detection – Blood testing in doping control – Problems with the supply of medicines Subject to IOC regulations: over the counter

drugs (OTC) – prescription only medicines (POMS) – Controlled drugs (CDs). Reporting test results – Education.

Reference Books:

1. Beotra Alka, (2000), Drug Education Handbook on Drug Abuse in Sports. Delhi: Sports Authority of India.
2. Bunn, J.N. (1998) Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice
3. Cart, E. Klafs & Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. LouisC. V. Mosphy Company
4. Daniel, D. Arnheim (1991) Principles of Athletic Traning, St. Luis, Mosby Year Book.

First Semester M.P.Ed

Course: Exercise Physiology	**Course Code:** 24PES1C2L
Teaching Hours/Week (L-T-P): 4 - 0 - 0	**No. of Credits:** 04
Internal Assessment: 30 Marks	**Semester End Examination:** 70 Marks

Course Objectives:

1. To assess basic concepts of exercise physiology
2. To employ students to apply the knowledge of energy systems during exercise.
3. To explain the effect of environment and ergogenic aids on exercise and training.
4. Develop a thorough understanding of the relationship between physical activity and health.
5. To develop the understanding of the physiological processes.

Course Outcomes (COs): After completion of this course students will be able to

1. Understand the basic principles of physiology and Exercise Physiology
2. Apply the knowledge in the field of physical education and movement activity.
3. Analyze the practical knowledge during the practical situation.
4. Remember and recall the definition of physiology and co-relate the principles of physiology.
5. Appraise the effects during the training and practical sessions

Unit 1: Skeletal Muscles and Exercise **11 Hours**

Macro & Micro Structure of the Skeletal Muscle Chemical Composition. Sliding Filament theory of Muscular Contraction. Types of Muscle fiber. Muscle Tone, Chemistry of Muscular Contraction – Heat Production in the Muscle, Effect of exercises and training on the muscular system.

UNIT II – Cardiovascular System and Exercise **11 Hours**

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

UNIT III – Respiratory System and Exercise **11 Hours**

Mechanics of Breathing – Respiratory Muscles, Minute Ventilation – Ventilation at Rest and During Exercise. Diffusion of Gases – Exchange of Gases in the Lungs –Exchange of Gases in the Tissues – Control of Ventilation – Ventilation and the Anaerobic Threshold. Oxygen Debt– Lung Volumes & Capacities–Effect of exercises and training on the respiratory system.

UNIT IV – Metabolism and Energy Transfer **11 Hours**

Metabolism–ATP – PC or Phosphate System – Anaerobic Metabolism – Aerobic Metabolism – Aerobic and Anaerobic Systems during Rest and Exercise. Short Duration High Intensity Exercises – High Intensity Exercise Lasting Several Minutes – Long Duration Exercises.

UNIT V – Climatic conditions and sports performance and cryogenic aids **11 Hours**

Variation in Temperature and Humidity – Thermoregulation – Sports performance in hot climate, Cool Climate, high altitude. Influence of: Amphetamine, Anabolic steroids, Androstenedione, Beta Blocker, Choline, Certain, Human growth hormone on sports Performance. Narcotic, Stimulants: Amphetamines, Caffeine, Ephedrine, Sympathetic medicaments. Stimulants and sports performance.

Note: Laboratory Practical in Physiology be designed and arranged internally.

REFERENCES:

- Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: Poompugar Pathipagam.
- Beotra Alka, (2000) Drug Education Handbook on Drug Abuse in Sports: Sports Authority of India Delhi.
- Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
- David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.
- Fox, E.L., and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.
- Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co.
- Richard, W. Bowers. (1989). Sports Physiology. WMC: Brown Publishers.

First Semester M.P.Ed

Course: Yogic Sciences	**Course Code:** 24PES1C3L
Teaching Hours/Week (L-T-P): 4- 0 - 0	**No. of Credits:** 04
Internal Assessment: 30 Marks	**Semester End Examination:** 70 Marks

Course Objectives:

1. To appraise an understanding of the principles of yogic practices
2. To Aquitaine with various types of asanas, pranayam, kriyas
3. To integrate sports with yoga for performance enhancement

Course Outcomes (COs):

After completion of this course students will be able to

1. To appraise an understanding of the principles of yogic practices
2. To Aquitaine with various types of asanas, pranayam, kriyas
3. To integrate sports with yoga for performance enhancement
4. After completing this course, the students will able to
5. Differentiate between various paths of yoga

Unit 1: Introduction **11 Hours**

Meaning and Definition of Yoga. Astanga Yoga: Yama, Niyama, Aasna, Pranayama, Prathyahara, Dharana, Dhyana, Samadhi, Concept of Yogic Practices; Principles of Breathing – Awareness – Relaxation, Sequence – Counter pose – Time – Place – Clothes – Bathing –

Emptying the bowels – Stomach – Diet – No Straining - Age - Contra-Indication - Inverted asana - Sunbathing.

Unit II – Aasanas and Pranayam **11 Hours**

Loosening exercise: Techniques and benefits. Asanas: Types- Techniques and Benefits, Surya Namaskar: Methods and benefits. Pranayama: Types- Methods and benefits. Nadis: Meaning, methods and benefits, Chakras: Major Chakaras- Benefits of clearing and balancing Chakras.

Unit III – Kriyas **11 Hours**

Shat Kriyas- Meaning, Techniques and Benefits of Neti –Dhati – Kapalapathi- Trataka – Nauli – Basti, Bandhas: Meaning, Techniques and Benefits of Jalendra Bandha, Uddiyana Bandha, MulaBandha.

Unit IV – Mudras **11 Hours**

Meaning, Techniques and Benefits of Hasta Mudras, Asamyuktahastam, Samyuktahastam, Mana Mudra, Kaya Mudra, Banda Mudra, Adhara Mudra. Meditation: Meaning, Techiques and Benefits of Meditation – Passive and active, Saguna Meditation and Nirguna Meditation.

Unit V – Yoga and Sports **11 Hours**

Yoga as Supplemental Exercise–Yoga Compensation Exercise–Yoga Regeneration Exercise-Power Yoga. Role of Yoga in Psychological Preparation of Athlete: Mental Wellbeing, Anxiety, Depression Concentration, Self-Actualization. Effect of Yoga on Physiological System: Circulatory, Skeletal, Digestive, Nervous, Respiratory, Excretory System.

REFERENCE:

1. George Feuerstein(1975) Text Book of Yoga. London: Motilal Bansaridass Publishers (P)Ltd.
2. Gore, (1990), Anatomy and Physiology of Yogac Practices. Lonavata: KanchanPrkashan.
3. Helen Purperhart(2004) The Yoga Adventure for Children. Netherlands: A Hunter Housebook
4. Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.
5. Karbelkar N.V.(1993) Patanjal Yogasutra Bhashya (Marathi Edition) Amravati: HanumanVyayamPrasarakMandal
6. Swami SatyananadaSarasvati. (1989), Asana Pranayama Mudra Bandha. Munger: Bihar School of Yoga.
7. Swami Sivananda, (1971), the Science of Pranayama. Chennai: A Divine Life SocietyPublication.
8. Thirumalai Kumar. S & Indira. S (2011) Yoga in Your Life, Chennai: The ParkarPublication.

First Semester M.P.Ed

Course: Research Process in Physical Education & Sports Sciences	**Course Code:** 24PES1C4L
Teaching Hours/Week (L-T-P): 4- 0 - 0	**No. of Credits:** 04
Internal Assessment: 30 Marks	**Semester End Examination:** 70 Marks

Course Objectives:

1. To develop understanding of the basic framework of research process.
2. To identify appropriate research topics. various sources of information for literature review.
4. Select and define appropriate research problem, parameters and research questions.
5. To develop an understanding of various research designs and techniques.
6. Write a research proposal and report.

Course Outcomes (COs):

After completion of this course students will be able to

1. Identify the research problem in the field of physical Education and sports
2. Know to Summarize the various research literature
3. Understand and apply the basics of statistics in research.
4. Organize the samples and sampling techniques which is relevant to the study.
5. Apply the systematic methods in writing research thesis

Unit 1: Introduction **11 Hours**

Meaning and Definition of Research – Need, Nature and Scope of research in Physical Education. Classification of Research, Location of Research Problem, Criteria for Selection of a problem, Qualities of a good Researcher.

UNIT II – Methods of Research **11 Hours**

Descriptive Methods of Research; Survey Study, Case study, Introduction of Historical Research, Steps in Historical Research, Sources of Historical Research: Primary Data and Secondary Data, Historical Criticism: Internal Criticism and External Criticism.

UNIT III – Experimental Research **11 Hours**

Experimental Research – Meaning, Nature and Importance, Meaning of Variable, Types of Variables. Experimental Design - Single Group Design, Reverse Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design, Factorial Design.

UNIT IV – Sampling **11 Hours**

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

UNIT V – Research Proposal and Report **11 Hours**

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

REFERENCE:

- Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc
- Clarke David. H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice Hall Inc.
- Craig Williams and Chris Wragg (2006) Data Analysis and Research for Sport and Exercise Science, London Routledge Press
- Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illonosis;
- Kamlesh, M. L. (1999) Reserach Methodology in Physical Education and Sports, New Delhi

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

First Semester M.P.Ed

Course: Mass demonstration: Drill and marching, Ceremonial parade	**Course Code:** 24PES1S1P
Teaching Hours/Week (L-T-P): 0- 0 - 4	**No. of Credits:** 02
Internal Assessment: 20 Marks	**Semester End Examination:** 30 Marks

Course Objectives:

1. To Organize the several events and ceremonies through the parade and organize the drills for various occasions by different drill equipment's.

COURSE OUTCOMES (COs):

After Completion of the course the students shall be able to:

1. Students Gain the knowledge for organizing various events occasion
2. Demonstrate various mass demonstration activities

MASS DEMONSTRATION ACTIVITIES

Lezzium, dumb-bell, wands, hoops/Malkhamb

Mass demonstration activities- Free arms drill, folk dances, etc.(*Students are expected to learn and organize mass drill in school situation*)

- Apparatus/ Light apparatus Grip
- Attention with apparatus/ Light apparatus
- Stand – at – ease with apparatus/ light apparatus
- Exercise with verbal command, drum, whistle and music – Two count, Four count, Eight count
- Sixteen count.
- Standing Exercise
- Jumping Exercise
- Moving Exercise
- Combination of above all.
- Drill and Marching
- Ceremonial parade

Note: The candidate has to select the activity depending on the availability of the facility and other suitable conditions. The evaluation will be done on any one of the activity of their choice, the co-ordination, demonstration, perfection and formation will be assessed

First Semester M.P.Ed

Course: Practical Lab: Physiology of Exercise	**Course Code:** 24PES1C1P
Teaching Hours/Week (L-T-P): 0 - 0 - 4	**No. of Credits:** 02
Internal Assessment: 20 Marks	**Semester End Examination:** 30 Marks

Course Objectives:

1. To assess basic concepts of exercise physiology.
2. To employ students to apply the knowledge of energy systems during exercise.
3. To explain the effect of environment and ergogenic aids on exercise and training.
4. Develop a thorough understanding of the relationship between physical activity and health.
5. To develop the understanding of the physiological processes.

COURSE OUTCOMES (COs):

After completing this course, the students will be able to

1. Describe and apply the fundamental and advanced concepts of exercise physiology.
2. Define and describe the term exercise physiology
3. Recognize the energy system for aerobic and anaerobic components of exercise.
4. Summarize the underlying physiological basis of physical fitness, physical training, health and wellness. Discover the nutritional aspect of fitness and performance.
5. Comprehend the physiological changes and adaptations during exercise in different environmental conditions

LABORATARY PRACTICAL: PHYSIOLOGY OF EXERCISE

I. Assessment of Blood Pressure

- Systolic and diastolic blood pressure, Hypertension and hypotension.

Assessment of Heart Rate

- Resting Heart Rate, Maximum Heart Rate, Target Heart Rate, Heart Rate Monitoring during the activity
- Manual method of Heart Rate measurement, Assessment of Heart Rate through Heart Rate monitor.

II. Assessment of Lung Volumes and Capacities, Spirometer tests.

- Vital capacity (VC), Total lung capacity. (TLC), Inspiratory capacity (IC), Functional residual capacity (FRC), Tidal volume (TV), Inspiratory reserve volume (IRV)
- Expiratory reserve volume (ERV), Residual volume (RV)

III. Metabolic Rate Measurements and Maximum Oxygen Consumption Tests

- Total energy expenditure, Basal metabolic rate
- Treadmill VO2 Max. test, Cyclic Ergometer VO2 Max. test.
- Lactate threshold assessment

IV. Aerobic Field Tests.

- Beep test, Cooper's minutes run and walk test, Harvard step test, 1 mile Rockport Fitness Walking Test

V. Anaerobic Field Tests

- Margarita-Kalaman stair climbing test, Vertical Jump test for vertical power
- Standing broad jump for horizontal power

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

First Semester M.P.Ed

Course: **Field Activity Practical:** 1. Athletics- Running Events, 2. Yoga, 3. Aerobics and 4. Judo (Any two)	**Course Code:** 24PES1C2P
Teaching Hours/Week (L-T-P): 0- 0 - 4	**No. of Credits:** 02
Internal Assessment: 20 Marks	**Semester End Examination:** 30 Marks

Course Objectives:

1. To define and acquaint training preparation of Game/Sport
2. To employ the rules and regulation of Game/Sport
3. To emphasis on preparation for the Game/Sport.
4. To acquaint the student with progressive teaching stages of fundamentals skills of Game/Sport.
5. To orient & employ the rules and regulation in organization of competition in Game/Sport.

COURSE OUTCOMES (COs):

After Completion of the course the students shall be able to:

1. Gain knowledge of the Game/Sport.
2. Learn the layout and marking for the Game/Sport.
3. Demonstrate various drills & lead up activities related to Game/Sport.
4. Develop the skills to teach rules, fundamentals and strategies of Game/Sport.

1. ATHELETICS: RUNNING EVENTS

Sprints: Start, Acceleration, Finish, Running styles in sprint, Related drills. Strategies and Tactics.

Middle Distance and Long-Distance Race: Start, Acceleration, Finish, Running styles in Middle Distance and Long-Distance Race, Related drills, Strategies and Tactics.

Relays: Baton exchange for different relays. Related drills. Strategies and Tactics.

Rules, Regulations, Officiating and Marking for above Track Events.

SPECIALISATION RECORD

UNIT 1: History and development of the Sprints, Hurdles and Relays.
UNIT 2: Skills and Techniques
UNIT 3: Fitness training
UNIT 4: Rules and Regulations

UNIT 5: Layout, construction and maintenance of track.
UNIT 6: Organization, Administration and managerial set up for conducting track events.
UNIT 7: Biomechanical principles of track events
UNIT 8: Injuries and Nutrition

*The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting.

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

2. YOGA

i. **Standing asana:**
Tadasana, Vrksasana, Utthitatrikonasana, Parivrttatrikonasana, Utthitaparsvakonasana, Veerabadhrasana/ Different postures, Garudasan
ii. **Sooryanamaskara:** 10 counts, 12 counts, 16 counts.
iii. **Sitting postures**: padmasana, vajrasana, sukasana, sidhasana,
iv. **Long sitting postures:**
Dandasana, Ardhanavasana, Gomukkasana, Veerasana, SupthaVajrasana, Vakrasana, Ardhamathyasana, Marichyasana, Utaushtrasana, Paschimottanasana
v. **Proline position:**
Shalabasana/ different forms, Bujangasana, Dhanurasana, Swanasana/ urdhavamukka, adhomukka
vi. **Supine lane postures:**
Alasana, Sarvangasana, Supthakonasana, Chakrasana
vii. **Balancing postures:** Kukuttasana, Lolasana, Bakasana, Mayurasana, Sirasasana
viii. **Pranayama:**
Nadishodhana pranayama (alternative nostril breathing), Surya anulom vilom, Chandra anulom vilom Cooling pranayama, Bhramari pranayama (humming bee breathe)
ix. **Relaxation postures:** Shavasana, Makarasana, Dandasana, tadasana and Shashankasana.
x. Introduction to Bhandas, Mudras, Charkara and Kriyas

NOTE: **Candidates shall select 2 Asanas from Standing, Sitting, prone and Supine postures for the Practicum Examination: for evaluation purposethe skill Perfection, demonstration, teaching and training ability, will be considered.**

3. AEROBICS

- Rhythmic Aerobics – dance, Low impact aerobics, High impact aerobics, Aerobics kick boxing
- Moves

March single, basics, side to side alternate, turn s/a, double side to side, step touch, grapevine, knee up, leg curl, kick front, toe touch, kick side, side lunge, over the top, back lunge, straddle, kick front, travel s 11. Kick side, corner, heel to reft, shape, 'e' shape, shapew, shape, repeater left mode Warm up and cool down. Being successful in exercise and adaptation to aerobic workout.

4. JUDO

Judo: Fundamental skills

- Rei (Salutation)-Ritsurei(Salutation in standing position), Zarai (Salutation in the sittingposition)
- Kumi kata (Methods of holding judo costume)
- Shisei (Posture in Judo)
- Kuzushi (Act of disturbing the opponent posture)
- Tsukuri and kake (Preparatory action for attack)
- Ukemi (Break Fall)-UrhiroUkemi (Rear break Fall), Yoko Ukemi (Side Break Fall), MaeUkemi (Front Break Fall), Mae mawariUkemi (Front Rolling break fall)
- Shin Tai (Advance or retreat foot movement)-Suri-ashi (Gliding foot), Twugi-ashi(Following footsteps), Ayumi-ashi (Waling steps.
- Tai Sabaki (Management of the body)
- NageWaze (Throwing techniques)-HizaGuruma (Knee wheel), SesaeTwurikomi-ashi(Drawing ankle throw), Deashihari (Advance foot sweep), O Goshi (Major loinm), SeoiNage (Shoulder throw).
- oKatamawaze(Grappling techniques)-Kesagatame (Scaff hold), Kata gatame (Shoulderhold), Kami shihogatama (Locking of upper four quarters), Method of escaping fromeach hold.

First Semester M.P.Ed

Course: **Field Activity Practical**:1. Kabaddi, 2. Basketball, 3. Swimming and 4. Wrestling/Gymnastics (any two	**Course Code:** 24PES1C3P
Teaching Hours/Week (L-T-P): 0 - 0 - 4	**No. of Credits:** 02
Internal Assessment: 20 Marks	**Semester End Examination:** 30 Marks

Course Objectives:

2. To define and acquaint training preparation of Game/Sport
3. To employ the rules and regulation of Game/Sport
4. To emphasis on preparation for the Game/Sport.
5. To acquaint the student with progressive teaching stages of fundamentals skills of Game/Sport.
6. To orient & employ the rules and regulation in organization of competition in Game/Sport.

COURSE OUTCOMES (COs):

After Completion of the course the students shall be able to:

1. Gain knowledge of the Game/Sport.
2. Learn the layout and marking for the Game/Sport.

3. Demonstrate various drills & lead up activities related to Game/Sport.
4. Develop the skills to teach rules, fundamentals and strategies of Game/Sport.

GAMES SPECIALIZATION- KABADDI, BASKETBALL, SWIMMING, WRESTLING/GYMNASTICS.

- Basic skills, Advanced skills, Teaching progression of different skills, Drills for each of the skills
- Biomechanical analysis of the skills, Specific fitness drills

SPECIALISATION RECORD

UNIT 1 : History and development of the Game/Sport
UNIT 2: Skills and Techniques
UNIT 3: Strategies and Tactics
UNIT 4: Officiating
UNIT 5: Layout and construction and maintenance of playfield/courts
UNIT 6: Organization, Administration and managerial set up for conducting tournament /competition
UNIT 7: Biomechanics and Energy systems

- Biomechanical principles of the game/sport
- Energy systems involved in the games and fitness programme specific to the game

UNIT 8: Injuries and Nutrition

- Game/Sport related injuries – Prevention, treatment and rehabilitation.
- Nutrition related to the game – Off season, and pre, during and post competition

*The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting.

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Department of Physical Education and Sports Sciences

Semester-II

DSC5: Sports Bio-Mechanics and Kinesiology

Course Title: Sports Bio-Mechanics and Kinesiology	Course code: 24PES2C5L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Identify biomechanical, health, physiological, and psychological limitations to and interventions for improving physical performance.
2. Analyze and explain the mechanisms underlying biomechanical, physiological, and psychological changes that occur during after acute and chronic exercise
3. Develop physical conditioning programs based on scientific principles designed to develop physical fitness and improve athletic performance

DSC5: Sports Bio-Mechanics and Kinesiology

Unit	Description	Hours
1	**Introduction:** Meaning, nature, role and scope of applied kinesiology and Sports Biomechanics. Meaning of Axis and Planes, Dynamics, Kinematics, Kinetics, Statics Centre of gravity –Line of gravity plane of the body and axis of motion, Vectors and Scalars.	11
2	**Muscle Action:** Origin, Insertion and action of muscles: Pactoralis major and minor, Deltoid, Biceps, Triceps (Anterior and Posterior), Trapezius, serrates, Sartorius, Rectus femoris, Abdominals, Quadriceps, Hamstring, Gastronomies.	11
3	**Motion and Force:** Meaning and definition of Motion. Types of Motion: Linear motion, angular Motion, circular motion, uniform motion. Principles related to the law of Inertia, Law of acceleration, and law of counter force. Meaning and definition of force- Sources of force -Force components. Force applied at an angle -Pressure - friction -Buoyancy, Spin - Centripetal force - Centrifugal force.	11
4	**Projectile and Lever:** Freely falling bodies -Projectiles -Equation of projectiles stability Factors Influencing equilibrium - Guiding principles for stability -static and dynamic Stability. Meaning of work, power, energy, kinetic energy and potential Energy. Leverage -classes of lever - practical application. Water resistance -Air resistance -Aerodynamics.	11

5	**Movement Analysis:** Analysis of Movement: Types of analysis: Kinesiological, Biomechanical. Cinematographic. Methods of analysis – Qualitative, Quantitative, Predictive. **Note:** Laboratory practical should be designed and arranged for students internally.	11

Reference:

1. Hoffman S.J. Introduction to Kinesiology (Human Kinesiology publication In.2005.
2. Thomas. (2001). manual of structural Kinesiology, New York: Me Graw Hill.
3. Uppal A.K. Lawrence Mamta MP Kinesiology (Friends Publication India 2004)
4. Uppal, A (2004), Kinesiology in Physical Education and Exercise Science, Delhi Friends Publications.
5. Williams M (1982) Biomechanics of Human Motion, Philadelphia; Saunders Co.

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-II

DSC6: Test, Measurement and Evaluation in Physical Education

Course Title: Test, Measurement and Evaluation in Physical Education	Course code: 24PES2C6L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Understand the Test, Measurement and Evaluation in physical education, Health and Fitness.

2. Know about the different types of test for different sports and games

3. Evaluate the battery test and others tests prescribed by the government efficiently

DSC6: Test, Measurement and Evaluation in Physical Education

Unit	Description	Hours
1	**Introduction:** Meaning and Definition of Test, Measurement and Evaluation. Need and Importance of Measurement and Evaluation. Criteria for Test Selection – Scientific Authenticity. Meaning, definition and establishing Validity, Reliability, Objectivity. Norms – Administrative Considerations.	11
2	**Motor Fitness Tests:** Meaning and Definition of Motor Fitness. Test for Motor Fitness; Indiana Motor Fitness Test (for elementary and high school boys, girls and College Men) Oregon Motor Fitness Test (Separately for boys and girls) - JCR test. Motor Ability; Barrow Motor Ability Test – Newton Motor Ability Test – Muscular Fitness – Kraus Weber Minimum Muscular Fitness Test.	11
3	**Physical Fitness Tests:** Physical Fitness Test: AAHPERD Health Related Fitness Battery (revised in 1984), ACSM Health Related Physical Fitness Test, Roger's physical fitness Index. Cardio vascular test; Harvard step test, 12 minutes run / walk test, multi-stage fitness test (Beep test)	11
4	**Anthropometric and Aerobic-Anaerobic Tests:** Physiological Testing: Aerobic Capacity: The Bruce Treadmill Test Protocol, 1.5 Mile Run test for college age males and females. Anaerobic Capacity: Margaria-Kalamen test, Wingate Anaerobic Test, Anthropometric Measurements: Meaning and Method of Measuring Height: Standing Height, Sitting Height. Method of measuring Circumference: Arm, Waist, Hip, Thigh. Method of Measuring Skin folds: Triceps, Sub scapular, Suprailiac.	11

5	**Skill Tests:** Specific Spots Skill Test: Badminton: Miller Wall Volley Test. Basketball: Johnson Basketball Test, Harrison Basketball Ability Test. Cricket: Sutcliff Cricket test. Hockey: Friedel Field Hockey Test, Harban's Hockey Test, Volleyball, Russel Lange Volleyball Test, Brady Volleyball Test. Football: Mor-Christian General Soccer Ability Skill Test Battery, Johnson Soccer Test, Mc-Donald Volley Soccer Test. Tennis: Dyer Tennis Test.	11

REFERENCES:

9. Authors Guide (2013) ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications.
10. Collins, R.D., & Hodges P.B. (2001) A Comprehensive Guide to Sports Skills Tests and Measurement (2nd edition) Lanham: Scarecrow Press
11. Cureton T.K. (1947) Physical Fitness Appraisal & Guidance, St. Louis: The C. Mosby Company
12. Getchell B (1979) Physical Fitness A Way of Life, 2nd Edition New York, John Wiley and Sons, Inc.

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-II

DSC7: Applied Statistics in Physical Education and Sports

Course Title: Applied Statistics in Physical Education and Sports	Course code: 24PES2C7L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Understand and apply the statistics in research.

2. Organize the samples and sampling techniques which is relevant to the study.

3. Apply the statistics in research thesis for evaluation

DSC7: Applied Statistics in Physical Education and Sports

Unit	Description	Hours
1	**Introduction:** Meaning and Definition of Statistics. Function, need and Importance of Statistics. Types of Statistics. Meaning of the terms, Population, Sample, Data, types of data. Variables; Discrete, Continuous. Parametric and non-parametric statistics.	11
2	**Data Classification, Tabulation and Measures of Central Tendency:** Meaning, uses and construction of frequency table. Meaning, Purpose, Calculation and advantages of Measures of central tendency – Mean, median and mode.	11
3	**Measures of Dispersions and Scales:** Meaning, Purpose, Calculation and advances of Range, Quartile, Deviation, Mean Deviation, Standard Deviation, Probable Error. Meaning, Purpose, Calculation and advantages of scoring scales; Sigma scale, Z Scale, Hull scale	11
4	**Probability Distributions and Graphs:** Normal Curve. Meaning of probability-Principles of normal curve – Properties of normal curve. Divergence form normality – Skewness and Kurtosis. Graphical Representation in Statistics; Line diagram, bar diagram, Histogram, Frequency Polygon, Ogive Curve.	11
5	**Inferential and Comparative Statistics:** Tests of significance; Independent "t" test, Dependent "t" test – chi – square test, level of confidence and interpretation of data. Meaning of correlation – co-efficient of correlation –calculation of co-efficient of correlation by the product moment method and rank difference method. Concept of ANOVA and ANCOVA.	11

	Note: It is recommended that the theory topics be accompanied with practical, based on computer software of statistics.	

Reference

1. Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, New Delhi
2. Rothstain A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc.
3. Sivarama krishnan. S. (2006) Statistics for Physical Education, Delhi; Friends Publication
4. Thirumalaisamy (1998), Statistics in Physical Education, Karaikudi, Senthil kumar.

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-II

DSC8: Sports Management and Curriculum Design in Physical Education

Course Title: Sports Management and Curriculum Design in Physical Education	Course code: 24PES2C8L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Assess marketing needs and formulate short term and long-term solutions.
2. Introduce the teaching and curriculum objectives and course module design
3. Evaluating learning intentions and the process that is guided through explicit and manageable criteria

DSC8: Sports Management and Curriculum Design in Physical Education

Unit	Description	Hours
1	**Introduction to Sports Management:** Definition, Importance. Basic Principles and Procedures of Sports Management. Functions of Sports Management. Personnel Management: Objectives of Personnel Management, Personnel Policies, Role of Personnel Manager in an organization, Personnel Recruitment and selection.	11
2	**Program Management:** Importance of Programme development and the role of management, Factors influencing programme development. Steps in programme development, Competitive Sports Programs, Benefits, Management Guidelines for School, Colleges Sports Programs, Management Problems in instruction programme, Community Based Physical Education and Sports program.	11
3	**Equipment's and Public Relation:** Purchase and Care of Supplies of Equipment, Guidelines for selection of Equipment's and Supplies, Purchase of equipment's and supplies, Equipment Room, Equipment and supply Manager. Guidelines for checking, storing, issuing, care and maintenance of supplies and equipment's. Public Relations in Sports: Planning the Public Relation Program –Principles of Public Relation – Public Relations in School and Communities – Public Relation and the Media.	11
4	**Curriculum:** Meaning and Definition of Curriculum. Principles of Curriculum Construction: Students centered, Activity centered, Community centered, Forward-looking principle, Principles of integration, Theories of curriculum development, Conservative (Preservation of Culture), Relevance, flexibility, quality, contextually	11

	and plurality. Approaches to Curriculum; Subject centred, Learner centred and Community centred, Curriculum Framework.	
5	**Curriculum Sources:** Factors that affecting curriculum: Sources of Curriculum materials – text books –Journals – Dictionaries, Encyclopaedias, Magazines, Internet. Integration of Physical Education with other Sports Sciences – Curriculum research, Objectives of Curriculum research – Importance of Curriculum research. Evaluation of Curriculum, Methods of evaluation.	11

Reference

1. Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, New Delhi
2. Sivarama krishnan. S. (2006) Statistics for Physical Education, Delhi; Friends Publication
3. Thirumalaisamy (1998), Statistics in Physical Education, Karaikudi, Senthil kumar.

Date Course Coordinator Subject Committee Chairperson

SEC 2: Adventures sports & Recreational Games

Course Title: Adventures sports & Recreational Games	Course code: 24PES2S2L/P
Total Contact Hours: 4 Hours of Practical	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 02
Summative Assessment Marks: 30	

Course Outcomes (COs):

At the end of the course, students will be able to:

1. Get introduced to various types of adventure sports & undergo some types of Adventure Sports
2. Know more about the fitness, fitness factors and training essential for adventure expert.
3. Know the Tips for better organization and planning of an Adventure activity.
4. Undertake course of instruction in outdoor first-aid, risk management, mountain weather, etc.

SEC 2: Adventures sports & Recreational Games

Unit	Description	Hours
1	**Adventures sports:** Definition of Adventures sports, History and Development of Adventures sports, Classification of Adventures sports, Scope and Importance of Adventures sports, Objectives and Types of Mountaineering-water sports, aero sports.	10
2	Various types of competitions and organization: planning, mountaning, trekking, rock climbing, hiking, river crossing, river rafting, kayaking, canoeing, single rope climbing, tyre bound, jumaring, para sailing, obstacles. Job opportunities-Training institution, infrastructure, equipment's, maintenance and benefits.	10
3	**Practical Recreational Games**: Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities. Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities. Participates regularly in physical activity. Achieves and maintains a health-enhancing level of physical fitness. Exhibits responsible personal and social behavior that respects self and others in physical activity settings. Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. **Note: The Student should visit to Adventure activity place for the practical experience.**	12
References (indicative) 1. Kilpatrick "All for Adventure Irene/Hall, Susan (ILT) 2. Kalpana Swaminathan "Adventure Sports".		

DSCL: Practical Laboratory

Course Title: Practical Lab: Bio mechanics & Kinesiology	Course code: 24PES2C4P
Total Contact Hours: 4 Hours of Practical	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 02
Summative Assessment Marks: 30	

Course Outcomes (COs):

At the end of the course, students will be able to:

1. Analysis the fundamental movements at various joint human movement using

   Mechanical principles

2. Understand mechanical principles and analysis the human movement to assess and

   Improve performance and reduce risk of injury.

DSCL: Bio-Mechanics and Kinesiology

Kinesiology

1. Basic Anatomical Position

2. Planes and Axes

3. Fundamental movements at various joints – Neck, Shoulder, Elbow, Wrist, Trunk, Hip, Knee and Ankle.

4. Identification and palpation of muscles – Biceps Brachii, Triceps Brachii, Deltoids, Pectoralis Major, Rectus Abdominus, Latissimus Dorsi, Trapezius, Teres Major, Rotator cuff muscles, Ilio Psoas muscle, Gluteus group, Quadriceps group, Hamstring group, Soleus, Gastrocnemius.

5. Joint movement analysis

6. Muscular analysis of movement

Biomechanics

1. Center of Gravity

2. Goniometer testing – flexibility and ROM.

2. Analysis of Standing, Sitting, walking, running.

3. Analysis of skills of various games.

4. Analysis of Long Jump, High Jump, Sprinting, Race walking, Shot Put, Discus Throw etc.

5. Video analysis of various skills as mentioned above.

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

DSCL: Field Activity Practical

Course Title: Field Activities Practical's 1. Athletics, 2. Kho-Kho, 3. Handball, 4. Football (Any two)	Course code: 24PES2C5P
Total Contact Hours: 4 Hours of Practical	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 02
Summative Assessment Marks: 30	

Course Outcomes (COs):

At the end of the course, students will be able to:

1. Gain knowledge of the Game/Sport.
2. Learn the layout and marking for the Game/Sport.
3. Demonstrate various drills & lead up activities related to Game/Sport.
4. Develop the skills to teach rules, fundamentals and strategies of Game/Sport.

Field Activities Practical's:

I: Athletics: Throwing and Jumping Events:

Specialization Record

Unit 1: History and development of the throwing events and combined events.

Unit 2: Skills and Techniques

Unit 3: Fitness training for each of the skills

Unit 4: Rules and Regulations

Unit 5: Layout and construction and maintenance of throwing arena.

Unit 6: Organization, Administration and managerial set up for conducting throwing events and combined events.

Unit 7: Biomechanical principles of the throwing events and combined events.

Unit 8: Injuries and Nutrition

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

II: Kho-Kho,

III: Handball &

IV: Football

Specialization Record

Unit 1 : History and development of the Game/Sport

Unit 2: Skills and Techniques

Unit 3: Strategies and Tactics

Unit 4: Officiating

Unit 5: Layout and construction and maintenance of playfield/courts

Unit 6: Organization, Administration and managerial set up for conducting tournament /competition

Unit 7: Biomechanics and Energy systems

Unit 8: Injuries and Nutrition

Note:* The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting.

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DSCL/T: Field Activity Practical

Course Title: Coaching Lesson of Sports and Games	Course code: 24PES2C6P
Total Contact Hours: 4 Hours of Practical	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 02
Summative Assessment Marks: 30	

Course Outcomes (COs):

At the end of the course, students will be able to:

1. Gain knowledge of the coaching
2. Enhance the coaching competency to the students
3. Student will able to coach for respective game

DSCL/T: Coaching Lessons of Game Specialization

The students of M.P.Ed. – II Semester need to be developed proficiency in taking coaching lesson in selected game discipline. In view of this, the students shall be provided with advance training and coaching in selected discipline. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes.

Each student teacher is expected to visit the schools and take coaching lessons on games allotted to them for 15 days at the end of which there will be a competition among the participating schools in the respective games. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these coaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

Department of Physical Education and Sports Sciences

Semester-III

DSC9: Sports psychology and sociology

Course Title: Sports psychology and sociology	Course code: 24PES3C9L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

4. Identify psychological and sociological limitations to and interventions for improving physical performance.
5. Analyze and explain the mechanisms underlying psychological and sociological changes that occur during after acute and chronic exercise

DSC9: Sports psychology and sociology

Unit	Description	Hours
1	**Introduction**: Meaning, Definition, History, Need and Importance of Sports Psychology. Present Status of Sports Psychology in India. Motor Learning: Basic Considerations in Motor Learning– Motor Perception – Factors Affecting Perception – Perceptual Mechanism. Personality: Meaning, Definition, Structure – Measuring Personality Traits. Effects of Personality on Sports Performance.	12
2	**Motivation:** Meaning and Definition, Types of Motivation: Intrinsic, Extrinsic. Achievement Motivation: Meaning, Measuring of Achievement Motivation. Anxiety: Method of Measuring Anxiety. Anxiety and Sports Performance. Stress: Causes. Stress and Sports Performance. Aggression, Self-Concept.	10
3	**Goal Setting:** Meaning and Definition, Process of Goal Setting in Physical Education and Sports. Relaxation: Meaning and Definition, types and methods of psychological relaxation. Psychological Tests: Types of Psychological Test: Instrument based tests: Pass-along test – Reaction timer – Finger dexterity board – Depth perception box, Questionnaire: Sports Achievement Motivation, Anxiety.	11
4	**Sports Sociology:** Meaning and Definition – Sports and Socialization of Individual Sports as Social Institution. National Integration through Sports. Fans and Spectators: Advantages and disadvantages on Sports Performance. Leadership: Meaning, Definition, types. Leadership and Sports Performance.	11

5	**Group Cohesion**: Definition and Meaning, Group Size, Groups on Composition, Group Cohesion, Group Interaction, Group Dynamics. Current Problems in Sports and Future Directions. Sports Social Crisis Management – Women in Sports: Sports Women in our Society, Gender inequalities in Sports. **Practical's**: At least five experiments related to the topics listed in the Units above should be conducted by the students in laboratory. (Internal assessment.)	11

Reference:

1. Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT)
2. Catalogue of Tests, New Delhi: National Council of Educational Research and Training Publication.
3. Jain. (2002), Sports Sociology, Heal Sahety Kendre Publisher

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

DSC10: Athletic care and rehabilitation

Course Title: Athletic care and rehabilitation	Course code: 24PES3C10L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Understand the psychological concepts with the sports and athlete injury specific situations.
2. Integrate the knowledge about posture, rehabilitation exercise and behavior modification of athletes.

DSC10: Athletic care and rehabilitation

Unit	Description	Hours
1	**Corrective Physical Education:** Definition and objectives of corrective physical Education. Posture and body mechanics, Standards of Standing Posture. Value of good posture, Drawbacks and causes of bad posture. Posture test – Examination of the spine.	10
2	**Posture:** Normal curve of the spine and its utility, Deviations in posture: Kyphosis, lordosis, flat back, Scoliosis, round shoulders, Knock Knee, Bow leg, Flat foot. Causes for deviations and treatment including exercises	10
3	**Rehabilitation Exercises:** Passive, Active, Assisted, resisted exercise for Rehabilitation, Stretching, PNF techniques and principles.	10
4	**Massage:** Brief history of massage – Massage as an aid for relaxation – Points to be considered in giving massage – Physiological, Chemical, Psychological effects of massage – Indication /Contra indication of Massage – Classification of the manipulation used massage and their specific uses in the human body – Stroking manipulation: Effleurage – Pressure Manipulation: Petrissage Kneading (Finger, Kneading, Circular) ironing Skin Rolling –Percussion manipulation: Tapotement, Hacking, Clapping, Beating, Pounding, Slapping, Cupping, Poking, Shaking Manipulation, Deep massage.	13
5	**Sports Injuries Care, Treatment and Support:** Principles pertaining to the prevention of Sports injuries – care and treatment of exposed and unexposed injuries in sports – Principles of apply cold and heat, infrared rays – Ultrasonic, Therapy – Short wave diathermy therapy. Principles and techniques of Strapping and Bandages.	12

REFERENCES:

6. Dohenty. J. Meno.Wetb, Moder D (2000) Track & Field, Englewood Cliffs, Prentice Hal Inc.

7. Lace, M. V. (1951) Massage and Medical Gymnastics, London: J & A Churchill Ltd.
8. McOoyand Young (1954) Tests and Measurement, New York: Appleton Century.
9. Naro, C. L. (1967) Manual of Massage and, Movement, London: Febra and Febra Ltd.
10. Rathbome, J.l. (1965) Corrective Physical education, London: W.B. Saunders & Co.
11. Stafford and Kelly, (1968) Preventive and Corrective Physical Education, New York

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

DSE1: A. Educational Technology in Physical Education.

Course Title: A. Educational Technology in Physical Education	Course code: 24PES3E1L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Correlate the of ICT & Education Technology in Physical Education and Sports concepts with the sports and athlete specific situations.
2. Integrate the knowledge about Communication Process and Teaching for learner.
3. List down the Educational Technology utilized in the field of sports

DSE1: A. Educational Technology in Physical Education

Unit	Description	Hours
1	**Nature and Scope:** Educational technology-concept, Nature and Scope. Forms of educational technology: Teaching technology, instructional technology and behavior technology; Transactional usage of educational technology: integrated, complementary, supplementary stand-alone (independent); programmed learning stage; media application stage and computer application stage.	12
2	**Physical Education and Communication:** Media for Instruction. Effectiveness of Communication in instructional system; Communication -Modes, Barriers and Process of Communication.	10
3	**Instructional Design:** Instructional Design: Concept, Views. Process and stages of Development of Instructional Design. Overview of Models of Instructional Design; Instructional Design for Competency Based Teaching: Models for Development of Self Learning Material.	11
4	**Audio Visual Media in Physical Education:** Audio-visual media - meaning, importance and various forms Audio/Radio: Broadcast and Audio recordings - strengths and Limitations, criteria for selection of instructional units, Audio Conferencing and Interactive Radio Conference. Video/Educational Television: Telecast and Video Recordings Strengths and limitations, Use of Television and CCTV in instruction and Training, SITE experiment, countrywide classroom project and Satellite based instructions.	12
5	**New Horizons of Educational Technology:** Recent innovations in the area of ET interactive video - Hypertext, video-texts, optical fiber technology - laser disk,	10

	computer conferencing. Etc. Procedure and organization of Teleconferencing/Interactive video-experiences of institutions, schools and universities. Recent experiments in the third world countries and pointers for, India with reference to Physical education. Recent trends of Research in Educational Technology and its future with reference to education.	

Reference

- Bhatia and Bhatia. The Principles and Methods of Teaching (New Delhi:Doaba House),1959.
- Communication and Education, D. N. Dasgupta, Pointer Publishers
- K. Sampath, A. Pannirselvam and S. Santhanam. Introduction to Educational Technology (New Delhi: Sterling Publishers Pvt. Ltd.) 1981.
- Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jalandhar, Sterling Publishers Pvt.

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

DSE1: B. Physical Fitness and Wellness

Course Title: B. Physical Fitness and Wellness	Course code: 24PES3E1L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Understand the concept of holistic health through fitness and wellness
2. Explain the concept of physical fitness, health related and motor fitness
3. Evaluate primary health status
4. Prepare fitness schedules& evaluate fitness

DSE1: B. Physical Fitness and Wellness

Unit	Description	Hours
1	**Introduction:** Meaning and Definition" of Physical Fitness, Physical Fitness Concepts and Techniques, Principles of physical fitness, Physiological principles involved in human movement. Components of Physical Fitness. Leisure time physical activity and identify opportunities in the community to participate in this activity. Current trends in fitness and conditioning, components of total health fitness and the relationship between physical activity and lifelong wellness.	12

2	**Nutrition:** Nutrients; Nutrition labelling information, Food Choices, Food Guide Pyramid, Influences on food choices-social, economic, cultural, food sources, Comparison of food values. Weight Management-proper practices to maintain, lose and gain. Eating Disorders, Proper hydration, the effects of performance enhancement drugs	10
3	**Aerobic Exercise:** Cardio respiratory Endurance Training; proper movement forms, i.e., correct stride, arm Movements, body alignment; proper warm-up, cool down, and stretching, monitoring heart rates during activity. Assessment of cardio respiratory fitness and set goals to maintain or improve fitness levels. Cardio respiratory activities including i.e. power walking, pacer test, interval training, incline running, distance running, aerobics and circuits.	11
4	**Anaerobic Exercise:** Resistance Training for Muscular Strength and Endurance; principles of resistance training, Safety techniques (spotting, proper body alignment, lifting techniques, spatial, awareness. and proper breathing techniques). Weight training principles and concepts; basic resistance exercises (including free hand exercise, free weight exercise, weight machines, exercise bands and tubing. medicine balls, fit balls) Advanced techniques of weight training	12
5	**Flexibility Exercise:** Flexibility Training, Relaxation Techniques and Core Training. Safety techniques (Stretching protocol; breathing and relaxation techniques) types of flexibility exercises (i.e. dynamic, static), Develop basic competency in relaxation and breathing techniques. Pilates, Yoga.	10

Reference

5. David K. Miller & T. Earl Allen, Fitness, A life time commitment, Surjeet Publication Delhi
6. Dificore Judy, the complete guide to the postnatal fitness, A & C Black Publishers Ltd.
7. Bedford row, London 1998.

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

DSE1: C. Women in Sports

Course Title: C. Women in Sports	Course code: 24PES3E1L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Identify various sociological theories and explain how they shape our thinking about gender equity
2. Explain the importance of theory and research in evaluating the sociocultural, psychological, political, and physiological issues pertaining to women in the sporting domain.
3. Apply what was learned in class to their own sport/exercise experience
4. Integrate theory and research with practical strategies for positive social change

DSE1: C. Women in Sports

Unit	Description	Hours
1	Introductions: History and Development of Women in Sport & Participation Trends, Social Issues in Indian Women's Sports, Sports participation of women in India.	11
2	Barriers to women Participation in Sports, Media Representation of Gender in Sport, Feminist Theories for Sports, Changing the Game and Playing with the Boys.	11
3	Psychosocial Impacts of Athletic Participation, Gender Verification and Gender Policies in Elite Sport, Gender equity and social attitude. Special consideration: Menarche, Menstrual, Dysfunction, Pregnancy, Menopause etc. Physical, Physiological, Psychological and Sociological aspects of women.	11
4	Sorts Commission for women, International Women's Sports Federations, Grass-Roots Growth & Development, Framing Gender and Disability, women and society. Popularity of women.	11
5	Athletic Scholarships for Women, Women in Intercollegiate Sport: Sports Photographs and Sexual Difference, women and family. Elite women athletes in the world and their personality.	11

Reference

1. Antil, J. H., Burton, E., & Robinson, M. (2012). Exploring the challenges facing female athletes as endorsers. Journal of Brand Strategy, 1(3), 292–307.

2. Bauman, A., Bull, F., Chey, T., Craig, C., Ainsworth, B., Sallis, J., … Pratt, M. (2009). The international prevalence study on physical activity: Results from 20 countries. International Journal of Behavioral Nutrition and Physical Activity, 6(1), 21–31.

3. Bibel, S. (2012, April 4). NCAA women's basketball overnight rating up over last year. Retrieved 28 Dec 2017 from: http://tvbythenumbers.zap2it.com/2012/04/04/ncaa-womens-basketballovernight-rating-up-over-last-year/127494/.

4. Bissell, K. L., & Duke, A. M. (2007). Bump, set, and spike: An analysis of commentary and camera angles of Women's Beach Volleyball during the 2004 Summer Olympics. Journal of Promotion Management, 13, 35–53.

5. Bissell, K. L. & Zhou, P. (2004). Must see TV or ESPN: Entertainment and sports media exposure and body-image distortion in college women. Journal of Communication, 54(1): 5-21.

Date	Course Coordinator	Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

DSE2: A. Value & Environmental Education

Course Title: A. Value & Environmental Education	Course code: 24PES3E2L/P
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Understand and apply the values in educational system.

2. Understand the environment and their importance.

3. Understand the natural resources.

DSE2: A. Value & Environmental Education

Unit	Description	Hours
1	**Introduction to Value Education:** Values: Meaning, Definition, Concepts of Values. Value Education: Need, Importance and Objectives. Moral Values: Need and Theories of Values. Classification of Values.	11
2	**Value Systems:** Meaning and Definition, Personal and societal Values, Consistency, internally consistent, internally inconsistent, Judging Value System, Commitment, Commitment to values.	10
3	**Environmental Education:** Definition, Scope, Need and Importance of environmental studies., Concept of environmental education, Historical background of environmental education, Celebration of various days in relation with environment, Plastic recycling & prohibition of plastic bag / cover, Role of school in environmental conservation and sustainable development, Pollution free ecosystem.	12
4	**Rural Sanitation and Urban Health:** Rural Health Problems, Causes of Rural Health Problems, Points to be kept in Mind for improvement of Rural Sanitation, Urban Health Problems, Process of Urban Health, Services of Urban Area, Suggested Education Activity, Services on Urban Slum Area, Sanitation at Fairs & Festivals, Mass Education.	11
5	**Natural Resources and related environmental issues:** Water resources, food resources and Land resources, Definition, effects and control measures of: Air	11

	Pollution, Water Pollution, Soil Pollution, Noise Pollution, Thermal Pollution Management of environment and Govt. policies, Role of pollution control board.	

Reference

- Miller T.G. Jr., (2012) Environmental Science (Wadsworth Publishing Co.)
- Odum, E.P. Fundamentals of Ecology (U.S.A.: W.B. Saunders Co.) 1971.
- Rao M.N.&Datta, A.K. (2008) (Waste Water Treatment (Oxford& IBH Publication Co. Pvt. Ltd

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

DSE2: B. Sports Engineering

Course Title: B. Sports Engineering	Course code: 24PES3E2L/P
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Understand the Design, properties and testing of sports equipment.
2. Understand the concepts of designing sports shoes, sports surfaces, racquets, bats and clubs.
3. Design sports equipment based on the rules of governing sporting bodies. Calculate mechanical properties of equipment;
4. Explain the principles of holistic innovation of sports equipment.

DSE2: B. Sports Engineering

Unit	Description	Hours
1	**Introduction** to sports engineering and Technology Meaning of sports engineering, human motion detection and recording, human performance, assessment, equipment and facility designing and sports related instrumentation and measurement.	11
2	**Mechanics of engineering** materials Concept of internal force, axial force, shear force, bending movement, torsion, energy method to find displacement of structure, strain energy. Biomechanics of daily and common activities –Gait, Posture, Body levers, ergonomics, Mechanical principles in movements such as lifting, walking, running, throwing, jumping, pulling, pushing etc.	11
3	**Sports Dynamics Introduction** to Dynamics, Kinematics to particles – rectilinear and plane curvilinear motion coordinate system. Kinetics of particles – Newton's laws of Motion, Work, Energy, Impulse and momentum.	11
4	**Building and Maintenance:** Sports Infrastructure- Gymnasium, Pavilion, Swimming Pool, Indoor Stadium, Out-door Stadium, Play Park, Academic Block, Administrative Block, Research Block, Library, Sports Hostels, etc. Requirements: Air ventilation, Day light, Lighting arrangement, Galleries, Store rooms, Office, Toilet Blocks (M/F), Drinking Water, Sewage and Waste Water disposal system, Changing Rooms (M/F), Sound System (echo-free), Internal arrangement according to need and nature of activity to be performed, Corridors and Gates for free movement of people, Emergency provisions of lighting, fire and exits, Eco-friendly outer surrounding. Maintenance staff, financial consideration. Building process:- design phase(including brief documentation), construction phase functional(occupational) life, Re-evaluation, refurnish, demolish. Maintenance policy, preventive maintenance, corrective maintenance, record and register for maintenance.	11

5	**Facility life cycle costing** Basics of theoretical analysis of cost, total life cost concepts, maintenance costs, energy cost, capital cost and taxation	11

Reference

Franz K. F. et. al., Editor,Routledge Handbook of Sports Technology and Engineering(Routledge, 2013)

Steve Hake, Editor, The Engineering of Sport (CRC Press, 1996)

Franz K. F. et. al., Editor The Impact of Technology on Sports II (CRC Press, 2007)

Helge N., Sports Aerodynamics (Springer Science & Business Media, 2009)

Youlin Hong, Editor Routledge Handbook of Ergonomics in Sport and Exercise (Routledge, 2013) Jenkins M., Editor Materials in Sports Equipment, Volume I (Elsevier, 2003)

Colin White, Projectile Dynamics in Sport: Principles and Applications

Eric C. et al., Editor Sports Facility Operations Management (Routledge, 2010)

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

DSE2: C. Leadership training camp

Course Title: C. Leadership training camp	Course code: 24PES3E2L/P
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Have increased knowledge to understand and evaluate organisational, management and leadership problems and possibilities.
2. Have increased knowledge and skills to design and change work organisation, to contribute to working environments in which everyone is able to contribute to organisational learning and success.
3. Have increased awareness of his/her personal leadership style.
4. Have strengthened his/her leadership skills, e.g. interpersonal skills, team development, conflict management, communication and change skills.

DSE2: C. Leadership training camp

Unit	Description	Hours

1	**Introduction to Leadership**: Meaning and Definition of Leadership, Types of Leadership, Personal leadership and leadership styles, Learning and learning to learn, Leadership of change, Appreciative inquiry and Appreciative leadership, People's reactions to change	10
2	**Leadership Skills:** Coaching skills, Leadership in groups: building and leading efficient teams, Conflict management and handling difficult conversations, Communications skills, especially listening skills, Strategic Management: Creating a vision, Analyse the strengths and weaknesses of an organisation, Organisational Design, The basics of a planning process	11
3	**National Integration and Awareness:** To inculcate sense of patriotism, secular values and motivate cadets to contribute towards nation building through national unity and social cohesion. Scope: The concepts of National Interests, Objectives and Integration, Unity in diversity and cultural heritage of India. Religions, Culture, Traditions and Customs of India National Integration: Importance and Necessity, Freedom Struggle and Nationalist Movement in India. Problems/ Challenges of National Integration. Unity in Diversity. Famous Leaders of India, Images/ Slogans for National Integration, Contribution of Youth to Nation Building	12
4	**Personality Development:** Introduction to Personality development, Factors influencing/shaping personality: Physical, Social, Psychological and philosophical, Self-Awareness – know yourself, Critical and creative thinking, Communication skills: group discussions/lectures, Self-confidence, courage & self-conviction, Effects of leadership with historical examples, Problem solving skills, Interview skills, Importance of group and team work, Effective use of time, Coping with stress / emotions, Sociability: social skills , Characteristics of healthy personalities – ethics/values.	12
5	**Practical experience** for the students at camp cite. (Students should real camp experience during course (Internal assessment).	10
Reference		

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

GEC1: A. Yoga and Aerobics

Course Title: A. Yoga and Aerobics	Course code: 24PES3G1L/P
Total Contact Hours: 2 Hours/week	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 2 Hours
Summative Assessment Marks: 30	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Differentiate between various paths of yoga
2. Apply and demonstrate various benefits of yoga to be applied in the field of sports
3. Relate Yoga with health and wellness
4. Understand various exercise warm-up techniques
5. Understand how to develop and administer low, moderate, and high intensity instructor-led exercise programs for various populations.

GEC1: A. Yoga and Aerobics

Unit	Description	Hours
1	**Yoga:** Meaning and Definition of Yoga. History and Development of Yoga, Ashtanga Yoga, Concept of Yogic Practices; Principles of Yogic practitioner. Techniques and Benefits of Asana, Pranayama and Dhyana. Techniques and Benefits of Kriyas, Bandhas and Mudras system.	11
2	**Yoga for all:** Yoga Supplemental Exercise, Yoga Compensation Exercise, Yoga Regeneration Exercise-. Role of Yoga in Psychological Preparation of athlete.	10
3	**Aerobics:** Apply the principles of aerobic and anaerobic training to various instructor-led exercise settings with and without music accompaniment, warm-up techniques including active vs. slow stretch, rhythmic vs. ballistic, and the specific muscle groups involved. How to develop and administer low, moderate, and high intensity instructor-led exercise programs for various populations, Demonstrate the knowledge how to develop an appropriate sequence of movement in a instructor-led exercise program. Apply basic biomechanics principles to resistance training exercise. Skill, combination, and routine development of various exercise programs. Note: Students should gain the practical experience.	12
Reference		

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

GEC1: B. Physical Fitness and Wellness

Course Title: B. Physical Fitness and Wellness	Course code: 24PES3G1L/P
Total Contact Hours: 2 Hours/week	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 2 Hours
Summative Assessment Marks: 30	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Understand the concept of holistic health through fitness and wellness
2. Explain the concept of physical fitness, health related and motor fitness
3. Evaluate primary health status
4. Prepare fitness schedules& evaluate fitness

GEC1: B. Physical Fitness and Wellness

Unit	Description	Hours

1	**Introduction:** Meaning and Definition" of Physical Fitness, Principles of physical fitness,. Components of Physical Fitness. Leisure time physical activity, the relationship between physical activity and lifelong wellness. **Nutrition:** Nutrients; Nutrition labelling information, Food Choices, Food Guide Pyramid, Influences on food choices-social, economic, cultural, food sources, Comparison of food values. Weight Management-proper practices to maintain, lose and gain. Eating Disorders.	12
2	**Aerobic Exercise:** Cardio respiratory Endurance Training; proper movement forms, i.e., correct stride, arm Movements, body alignment; proper warm-up, cool down, and stretching, monitoring heart rates during activity. Assessment of cardio respiratory fitness and set goals to maintain or improve fitness levels. Cardio respiratory activities.	10
3	**Wellness:** Types of wellness and Importance, Flexibility Training, Relaxation Techniques and Core Training. Safety techniques (Stretching protocol; breathing and relaxation techniques) types of flexibility exercises (i.e. dynamic, static), Develop basic competency in relaxation and breathing techniques, Yoga.	8

Reference

8. David K. Miller & T. Earl Allen, Fitness, A life time commitment, Surjeet Publication Delhi
9. Dificore Judy, the complete guide to the postnatal fitness, A & C Black Publishers Ltd.
10. Bedford row, London 1998.

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

GEC1: C. Martial Art and Combative Sports

Course Title: C. Martial Art and Combative Sports	Course code: 24PES3G1L/P
Total Contact Hours: 02 Hours/week	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 2 Hours
Summative Assessment Marks: 30	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Demonstrate proficiency in physically executing the specific technique and body landing positions that minimize the potential for injury when falling or being thrown to a matted surface by a training partner.
2. Interpret their coursework training experience to help evaluate the potential benefits of including martial arts training as one of their life-long personal health and wellness pursuits.
3. Employ knowledge relating to worldwide martial arts styles to appraise and choose the best fit for their future martial arts training efforts.

GEC1: C. Martial Art and Combative Sports

Unit	Description	Hours
1	Meaning and definition of Martial arts and combative sports, Nature and Importance of Various martial arts and combative sports, Opening / closing salutations, etiquette standards, and the various bowing traditions that are typically encountered within a cultural martial art class setting.	11
2	Low impact warm-up activities that ensure muscle / tendon / joint readiness and that promote flexibility, range of motion, eye-to-hand coordination and speed, promote personal health and safety.	11
3	Origins, theoretical basis, and concepts relating to cultural/traditional to combative/self-defense styles. Personal self-defense, flinch response, adrenal stress syndrome/conditioning. Various personal development topics and eastern metaphysical theories and concepts relating to Ki energy and martial arts training. Ki breathing and Ki Hahp techniques as an introduction to Ki Gong theory.	11

Reference

Figueiredo, Abel (2009) „The Combat Sports in Physical Education Classes – A Basic Perspective", in: Cynarski, Wojciech (ed.) Martial Arts and Combat Sports – Humanistic Outlook, Rzeszów, Wydawnictwo Uniwersytetu Rzeszowskiego, ISBN 978-83-7338-439-2, pp. 145-149

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

SEC3: PEDAGOGY

Course Title: **Pedagogy**	Course code: 24PES3S3P
Total Contact Hours: 2 Hours/week	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 30	

Course Outcomes (COs):

At the end of the course, students will be able to:

4. Gain knowledge of the coaching
5. Enhance the teaching and coaching competency to the students
6. Student will able to coach for respective game

SEC3-PEDAGOGY

(A) Coaching Lessons of Track and Field

The students of M.P.Ed – III Semester need to develop proficiency in taking coaching lesson on selected track and field events. In view of this, the students shall be provided with advance training and coaching in selected discipline. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class, they are going to handle at school level.

Each student teacher is expected to take at least fifteen lessons in track and field for the BPEd students or high school students as decided by the departmental council at the end of which a competition will be conducted among the trainees of the MPEd teachers. For this purpose a group of three MPEd students in each coaching team may be made to coach track, jumps and throws. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these coaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

(B) Coaching Lessons of Game Specialization

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

Each student teacher is expected to visit the schools and take coaching lessons on games allotted to them for minimum 20 days or as decided by the departmental council at the end of which there will be a competition among the participating schools in the respective games. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these coaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

DSCP: Practical Laboratory: Sports Psychology

Course Title: Sports Psychology	Course code: 24PES3C7P
Total Contact Hours: 4 Hours of Practical	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 02
Summative Assessment Marks: 30	

Course Outcomes (COs):

At the end of the course, students will be able to:

1. Analysis the fundamental of psychology
2. Correlate the psychological concepts with the sports and athlete specific situations
3. Integrate the knowledge about personality, motor learning for behavior modification of athletes
4. Relate different theories of motor learning with its influence on motor perception and related cognitive abilities of athletes.
5. List down the strategies for motivation utilized in the field of sports.
6. Analyze the issues related to social behavior based on physiological structure and function

DSCP: Sports Psychology

I

1. Aptitude tests, Interest inventories/schedules, Bell Adjustment inventory, Achievement motivation Tests, Personality Tests – self esteem, self confidence, self concept, self and ideal discrepancy.

II

1. Stressful life –events scale, Anxiety, Self-esteem, Extraversion and neuroticism personality assessment, Well-being Questionnaire.

III

1. Sociometry, Measuring styles of leadership behaviour, Attitude measurement, Level of aspiration, Emotional Intelligence

IV

1. Muller Lyer Illusion, Maze Learning, Self confidence test, Imagery test, Self talk

V

1. Psychological reactions to sports injuries, Reaction ability tests, Anxiety tests, Depth perception test, Cognitive ability test

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-III

DSCP: Field Activity Practical

Course Title: 1. Hockey, Volleyball, Handball, 4. Karate (Any two)	Course code: 24PES3C8P
Total Contact Hours: 4 Hours of Practical	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 02
Summative Assessment Marks: 30	

Course Outcomes (COs):

At the end of the course, students will be able to:

1. Gain knowledge of the Game/Sport.
2. Learn the layout and marking for the Game/Sport.
3. Demonstrate various drills & lead up activities related to Game/Sport.
4. Develop the skills to teach rules, fundamentals and strategies of Game/Sport.

Field Activities Practical's:

I: HOCKEY

II: VOLLEYBALL

III: HANDBALL &

IV: KARATE

Specialization Record

Unit 1 : History and development of the Game/Sport

Unit 2: Skills and Techniques

Unit 3: Strategies and Tactics

Unit 4: Officiating

Unit 5: Layout and construction and maintenance of playfield/courts

Unit 6: Organization, Administration and managerial set up for conducting tournament /competition

Unit 7: Biomechanics and Energy systems

Unit 8: Injuries and Nutrition

Note:* The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting.

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Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-IV

DSC11: Sports Medicine

Course Title: Sports Medicine	Course code: 24PES4C11L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. To understand the Importance of sports medicine and Scope of sports medicine
2. Understand the Role of sports medicine expert in enhancing sports performance
3. Understand the Sports injuries, their prevention, management and rehabilitation

DSC11: Sports Medicine

Unit	Description	Hours
1	**Introduction to Sports Medicine**: Meaning, concept and scope of Sports Medicine, Historical back ground of Sports Medicine, Need and importance of Sports Medicine, Hygiene and Athlete: Sports hygiene: Meaning, concept and scope, Personal hygiene; Bodily cleanliness, personal belongings, Hygiene in camps and competitions	11
2	**Health Hazards in sports**: Dope: History, definition, classification and their adverse effects on Health and Sports performance, Role of Managers and Coaches in controlling the dope problems, Malnutrition among athletes and its correction, Environmental Stress Safety in sports, Gymnasium, playground and swimming pool safety, Safety appliances in different sports and their uses, Provisions of safety rules in competitive sports and principles of safety	11
3	**Sports Injuries**: Classification of injuries in sports, Causes of injuries in sports iii. Role of rules and regulations in prevention of injuries, General preventive measures to minimize sports injuries, Specific preventive measures to minimize sports injuries	11
4	**Management of Sports Injuries Soft tissue injuries**: Signs, Symptoms and Management of - Abrasions, Blisters, Lacerations, Puncture wounds, Corn, Contusions, Muscle strains, Tendon injuries, Bursitis & Sprains, Dislocations: Causes, Signs, Symptoms and Management, Fractures: Types, Causes, Signs, Symptom and Management, Head Injuries	11
5	**Physiotherapy and its use in the treatment** and rehabilitation in sports injuries. Exercise therapy: Types and Principles, Massage Therapy: Types, Techniques, Indication and Contra indications. Therapeutic Modalities, Different forms of Hydrotherapy and thermotherapy, Hot and Cold Packs, Whirlpool, Contrast bath, Paraffin bath, Infrared, Ultra-violet, Ultra Sonic, Short wave diathermy, Electric Muscle Stimulation, Indications and Contra-indications of each therapy	11

Reference:

1. Marua K. Anderson, Malissa marlin : "Quick References Guide for sports injury Management"
2. Dr. P.K. Pande Sports Medicine

3. Griffith H. Winter : " Complete guide to sports, injuries.
4. Borozne, Joseph and bechar stanley, safely in team sports.
5. Clarke Kenneth S: Drugs and the coach
6. Borozne, Joseph and Pechar stanly: Administration and Supervision for Safety in Sports.
7. Ryan A.J. and Fred L. Athman : " Sports Medicine"
8. Johnson W.R. : Science and Medicine of exercise and sports.
9. Govindarajulu N. Sports Medicine, Friends Publications, New Delhi, India

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-IV

DSC12: Health Education and Sports Nutrition

Course Title: Health Education and Sports Nutrition	Course code: 24PES4C12L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Understand the concept of holistic health through fitness and wellness
2. Explain the concept of physical fitness , hygiene, health related and nutrition and weight management
3. Evaluate primary health status and Prepare fitness schedules& evaluate fitness

DSC12: Health Education and Sports Nutrition

Unit	Description	Hours
1	**Health Education:** Concept, Dimensions, Spectrum and Determinants of Health Definition of Health, Health Education, Health Instruction, Health Supervision Aim, objective and Principles of Health Education Health Service and guidance instruction in personal hygiene	10
2	**Health Problems in India**: Communicable and Non-Communicable Diseases Obesity, Diabetes, Malnutrition, Adulteration in food, Environmental sanitation, Explosive, Population, Personal and Environmental Hygiene in schools Objective of school health service, Role of health education in schools Health Services - Care of skin, Nails, Eye health service, Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care etc.	10
3	**Hygiene and Health**: Meaning of Hygiene, Type of Hygiene, dental Hygiene, Effect of Alcohol on Health, Effect of Tobacco on Health, Life Style Management, Management of Hypertension, Management of Obesity, Management of Stress and diabetes	10
4	**Introduction to Sports Nutrition** Meaning and Definition of Sports Nutrition, Role of nutrition in sports, Basic Nutrition guidelines, Nutrients: Ingestion to energy metabolism (Carbohydrate, Protein and Fat), Role of carbohydrates, Fat and protein during exercise.	13
5	**Nutrition and Weight Management** Concept of BMI (Body mass index), Obesity and its hazard, dieting versus exercise for weight control Maintaining a Healthy Lifestyle, Weight management program for sporty child, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss	12

REFERENCES:

1. Bucher, Charles A. "Administration of Health and Physical Education Programme".
2. Delbert, Oberteuffer, et. al." The School Health Education".
3. Ghosh, B.N. "Treaties of Hygiene and Public Health".

4. Hanlon, John J. "Principles of Public Health Administration" 2003.
5. Turner, C.E. "The School Health and Health Education".
6. Moss and et. At. "Health Education" (National Education Association of U.T.A.)
7. Nemir A. 'The School Health Education" (Harber and Brothers, New York).
8. Nutrition Encyclopedia, edited by Delores C.S. James, The Gale Group, Inc.
9. Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise as Nature Intended. Angus and Robertson.
10. Terras S. (1994) Stress, How Your Diet can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acids, Thorons.

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-IV

DSE3: A. Sports Journalism and Mass media

Course Title: A. Sports Journalism and Mass media	Course code: 24PES4E3L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. To understand and apply the concept of writing, reporting and editing.
2. Illustrate and apply the advertising concepts.
3. Interpret the concept of journalism and mass media

DSE3: A. Sports Journalism and Mass media

Unit	Description	Hours
1	**Introduction** Meaning and Definition of Journalism, Ethics of Journalism – Canons of journalism- Sports Ethics and Sportsmanship – Reporting Sports Events. National and International Sports News Agencies.	11
2	**Sports Bulletin** Concept of Sports Bulletin**:** Journalism and sports education – Structure of sports bulletin – Compiling a bulletin – Types of bulletin – Role of Journalism in the Field of Physical Education: Sports as an integral part of Physical Education – Sports organization and sports journalism – General news reporting and sports reporting.	11
3	**Mass Media** in Journalism**:** Radio and T.V. Commentary – Running commentary on the radio – Sports expert's comments. Role of Advertisement in Journalism. Sports Photography: Equipment- Editing – Publishing.	11
4	**Report Writing** on Sports Brief review of Olympic Games, Asian Games, Common Wealth Games World Cup, National Games and Indian Traditional Games. Preparing report of an Annual Sports Meet for Publication in Newspaper. Organization of Press Meet.	11
5	**Journalism** Sports organization and Sports Journalism – General news reporting and sports reporting. Methods of editing a Sports report. Evaluation of Reported News. Interview with and elite Player and Coach. Practical assignments to observe the matches and prepare report and news of the same; visit to News Paper office and TV Centre to know various departments and their working. Collection of Album of newspaper cuttings of sports news.	11

Reference

1. Ahiya B.N. (1988) Theory and Practice of Journalism: Set to Indian context Ed3. Delhi : Surjeet Publications

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

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Department of Physical Education and Sports Sciences

Semester-IV

DSE3: B. Theories of Games and Sports

Course Title: B. Theories of Games and Sports	Course code: 24PES4E3L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Understand the concept of different theories of games and sports.
2. Explain the concept of various sports and games and the culture and nature of sports and games.

DSE3: B. Theories of Games and Sports

Unit	Description	Hours
1	**Introduction:** Define sports and games, History and development of Games and sports are found in early human history, Types of games and sports: Individual and Group, Games and sports as human culture. Need and Importance of games and sports for personnel and social development.	12
2	**Fundamental theories** and Recreational games, Values of sports and games, Deference between sports and games, attitude towards sports and games, basic characteristics of games and sports.	12
3	**Play theories:** classical and contemporary/current: surplus energy, relaxation, recapitulation, anticipation, cathartic, recreation and pre-exercise.: psychoanalytic,	10

	arousal modulation, meta communicative, and cognitive theories, Play and overall Development of the Children.	
4	**Essentials game theory**, physical education and sports, physical education improve capacity for game theory, Gender differences in games and sports,	08
5	**Sport's governing bodies:** IOC, IOA, AAFI, International sports competitions, Play, Sports, Games, Spectators, organization, management.	08

Reference

1. Aumann, R. J. ([1987] 2008). "Game theory," Introduction, The New Palgrave Dictionary of Economics, 2nd Edition.
2. Halpern, Joseph Y. (2008). "Computer science and game theory," The New Palgrave Dictionary of Economics, 2nd Edition.
3. Myerson, Roger B. (1991). Game Theory: Analysis of Conflict, Harvard University Press, p. 1. Chapter-preview links, pp. vii–xi.
4. Camerer, Colin F. (2003). Behavioral Game Theory: Experiments in Strategic Interaction, pp. 5–7.
5. World Sports Encyclopedia (2003). Sport Discipline and Sporting Games.

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-IV

DSE3: C. Sports Injuries, First Aid and Cure.

Course Title: C. Sports Injuries, First Aid and Cure.	Course code: 24PES4E3L
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Illustrate and apply the concepts of sports injuries and rehabilitation.
2. Interpret the concept of therapeutic aspects of exercise.
3. Demonstrate and take care of the preventive and curative aspect of sports injuries.
4. Understand the scope of First Aid and role of First Aid and Comprehend the ways to manage and incident.

DSE3: C. Sports Injuries, First Aid and Cure.

Unit	Description	Hours
1	**Sports injuries**: Types of Injuries, Definition, Causes, Clinical Features, Management and Prevention of Soft Tissue Injuries: Skin Injuries, strain, Sprain, contusion, cramp, Tendon injuries, Bursitis. Bone injuries: Fracture – Subluxation, Dislocation. Importance of assessment & evaluation - Methods of evaluation, documentation, Clinical Examination, Reliability & Validity of the tests, Investigative Procedures, Causes & Mechanism of Sports Injuries, Principle of management of sports injuries.	12
2	**Sports Specific Injuries**: Sports specific injuries, with special emphasis on the specific risk factor, nature of Sports, kind of medical intervention anticipated and prevention with respect to various sporting events, Individual events: Field & Track, Team events: Hockey, Cricket, and Football, Contact and Non-contact sports, Water sports	10
3	**Health Issues in Sports** Health issues in climatic conditions: Heat related injuries – Heat stroke – Heat exhaustion – Heat Cramp – Heat Stress – Cold related injuries – Frostbite – Hypothermia – Altitude Sickness.	08
4	**Principles of Injury prevention:** Warm up – Cool down – Stretching – Types of stretching – Principles of stretching. PRICE technique – Immobilization and Early mobilization – Splinting – Handling & Transfer - Cryotherapy: Methods of application (Ice packs, Ice towel, Ice Immersion, Ice cube massage, Excitatory cold, Vapocoolant spray, cryokinetics & Cold whirlpool) - Taping and Bracing - Soft tissue Massage – Trigger point release – Muscle energy techniques – Manual therapy.	12
5	**First Aid and Cure:** Definition of first aid, Aim, Need and Importance of first aid, General principles of first aid, ABCDE method, First aid services, First Aid kits.	08

Reference

1. Brukner and Karim Khan: Clinical Sports Medicine, McGraw Hill.
2. McKeag, Douglas B. Moeller, James L: ACSM's Primary Care Sports Medicine, 2nd Edition, Lippincott Williams & Wilkins.
3. Darren Johnson and Scott Mair: Clinical Sports Medicine, 1st ed, Mosby
4. Reed: Sports Injuries – Assessment and Rehabilitation, W.B. Saunders.
5. WHO. Psychological First Aid Guide for Field Workers. 2011

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Department of Physical Education and Sports Sciences

Semester-IV

DSE4: A. Sports Technology

Course Title: A. Sports Technology	Course code: 24PES4E4L/P
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Design, properties and testing of sports equipment
2. Explain the concepts of designing sports shoes, sports surfaces, bats and clubs
3. Explain the principles of equipment performance and matching
4. Design sports equipment based on the rules of governing sporting bodies
5. Demonstrate the capability of designing protective equipment and Calculate mechanical properties of equipment
6. Design customized sports equipment for elite athletes and Test sports equipment.

DSE4: A. Sports Technology

Unit	Description	Hours
1	Introduction to sports Technology: Meaning and definition of sports technology, Need and Importance of technology in sports, barrios technology in sports, sport specific computer software, technology and the Olympic games and other international sports events, performance assessment by using the technology, equipment and facility designing and sports related instrumentation and measurement. Technological impacts on sports.	12
2	Adhesives- Nano glue, nanomoulding technology, Nano turf, Sports technology awards, Fitness and Fitness Assessment Apps, Mechanics of technology materials, manufacture and testing the equipment's, clothing and footwear, Biomechanics of daily and common activities, Gait, Posture, Body levers, ergonomics, Mechanical principles in movements such as lifting, walking, running, throwing, jumping, pulling, pushing etc.	12
3	Modern surfaces for playfields, construction and installation of sports surfaces, Types of materials, Sports Industry, develop new sports good and products, principles of product design, technology influence how athletes train and compete, Fan engagement technology, impact of technology on sports, Media and content-related platforms; measurement platforms for data, analytics and biometrics; and esports,	10
4	Innovation Sports Tech Trends & Promising Startups: Performance Analytics, Fan Engagement, Smart Stadium, eSports, Immersive Training, Cybersecurity, Advanced Streaming, Sustainability. Building and Maintenance Sports Infrastructure by using the technology, Gymnasium, Pavilion, Swimming Pool, Indoor Stadium, Out-door Stadium, Play Park, Academic Block, Administrative Block, Research Block, Library, Sports Hostels, etc.	10

5	Playing Equipments: Balls: Types, Materials and Advantages, Facility life cycle costing Basics of theoretical analysis of cost, total life cost concepts, maintenance costs, energy cost, capital cost and taxation, Training Gadgets: Mechanism and Advantages. **Note:** Students should be encouraged to design and manufacture improvised sports testing equipment in the laboratory/workshop and visit sports technology factory/high tech infrastructure places/ sports goods manufacturers.	08

Reference

1. Steve Hake, Editor, The Engineering of Sport (CRC Press, 1996)
2. Franz K. F. et. al., Editor the Impact of Technology on Sports II (CRC Press, 2007)
3. Helge N., Sports Aerodynamics (Springer Science & Business Media, 2009)
4. Jenkins M., Editor Materials in Sports Equipment, Volume I (Elsevier, 2003)

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-IV

DSE4: B. Physiotherapy and Therapeutic Exercise

Course Title: B. Physiotherapy and Therapeutic Exercise	Course code: 24PES4E4L/P
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Describe the Biophysical properties of connective tissue, effect of mechanical loading, factors influencing the Muscle strength, mobility of articular &peri-articular soft tissues.
2. Describe the physiological & Therapeutic uses, merits /demerits of various exercise modes.
3. Demonstrate various therapeutic exercises on self & acquire the application skill on models.
4. Acquire the skill of assessment of isolated &group muscle strength, & Range of motion of the joints subjectively & objectively.
5. Describe the pattern of normal and abnormal movements of various joints and activities

DSE4: B. Physiotherapy and Therapeutic Exercise

Unit	Description	Hours
1	Introduction: meaning and definition of physiotherapy and therapeutic exercise, need and importance, Principle, classification, techniques of physiological& therapeutic effects, indications & contraindications of therapeutic exercises.	10
2	Progressive resisted exercises, applied biomechanics, Starting Position and derived position, Relaxation, Posture, Gait and human Locomotion, Active & Passive Movements,	08
3	Group Exercise, Mat activities & Functional re-education, P.N.F, Traction, Manipulation, Hydrotherapy, History of massage, Classification of massage, Physiological Effects of massage on various body systems, Massage techniques, Effects & Uses.	10
4	Relaxed passive Movements, Stretching, Muscle Grading/Manual Muscle testing , Muscle strengthening/Re-education of Muscle, Resisted Exercise, Goniometry , Methods of Joint Mobilization, Suspension therapy, Balance & co-ordination exercise, Chest Physiotherapy, Breathing exercise, Therapeutic Application of Massage, Techniques used for Various parts of body Massage, Sports massage, Walking aids/Crutch walking, Describe the complications to patients due to prolonged bed rest/Demonstrate maintenance exercise for patients on prolonged bed rest	12
5	Relaxed passive Movements, Stretching- soft tissues, Manual muscle Testing, Methods of Joint mobilization and Goniometry (Suspension Therapy), Balance and	10

	Co-ordination exercise, Chest Physiotherapy, Massage-Upper limb, lower Limb, back, Neck, Face, Crutch Walking, Prolonged bed rest Complication & Maintenance Exercise program, Sports massage.	
Reference		

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-IV

DSE4: C. Adapted Physical Education

Course Title: C. Adapted Physical Education	Course code: 24PES4E4L/P
Total Contact Hours: 4 Hours/week	Course Credits: 04
Formative Assessment Marks: 30	Duration of ESA/Exam: 3 Hours
Summative Assessment Marks: 70	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Demonstrate the ability to screen and assess physical education skills of individuals exhibiting various disability conditions.
2. Demonstrate the ability to write in behavioral terms and assess instructional objectives for adapted physical education
3. Demonstrate the ability to reassess and revise the student's program as necessary.
4. Demonstrate the ability analyze, adapt, and implement physical education curriculum in providing programs for a variety of disability conditions.
5. Demonstrate the ability to use community and staff resources within the special education environment.

DSE4: C. Adopted Physical Education

Unit	Description	Hours
1	An Introduction to Adapted Physical Education and Sport, Instructional Strategies for Adapted Physical Education, Intellectual Disabilities Autism Spectrum Disorders Spinal Cord Disabilities Visual Disabilities & Hearing Impairments Adopted Physical Education Definition, objectives and Scope of corrective physical Education. Body Types. Rehabilitation Principles and program, Rehabilitation of athletic injuries: Passive, Active, Assisted, resisted exercise for Rehabilitation, Stretching, PNF techniques and principles.	12
2	Posture Meaning, Definition of posture and postural education. Dynamic and static postures, common postural deformities: Kyphosis, lordosis, Scoliosis, Knock Knee, Bow leg, Flat foot. Causes for deviations and treatment including corrective exercises. Posture test – Examination	12

	of the spine, Kyphosis, Lordosis, Scoliosis, Knock Knee, Bow leg, Flat foot. Drawbacks and causes of bad posture	
3	Preventive Measures of Sports Injuries Protective Sports Equipment's, Training and conditioning techniques, Nutritional considerations, Environmental considerations, Mechanism and characteristic of sports trauma, Bandaging and Tapping, Tissue response to injury, psychological intervention for sports injuries, Warm up and Cool down.	10
4	Massage Manipulation Brief history of massage – Massage as an aid for relaxation – Points to be considered in giving massage – Physiological, Chemical, Psychological effects of massage – Indication / Contra indication of Massage – Classification of the manipulation used massage and their specific uses in the human body – Stroking, Pressure, Percussion, Shacking	10
5	Therapeutic Modalities Care and treatment of exposed and unexposed injuries in sports – Cryotherapy, Hydrotherapy, Whirlpool, contrast bath, infrared rays , Ultraviolet Ray, Ultrasound, , Short wave diathermy therapy, IFT, Wax, traction.	08

Reference

1. Dohenty. J. Meno.Wetb, Moder D (2000) Track & Field, Englewood Cliffs, Prentice Hal Inc.
2. Lace, M. V. (1951) Massage and Medical Gymnastics, London: J & A Churchill Ltd.
3. Mc Ooyand Young (1954) Tests and Measurement, New York: Appleton Century.
4. Naro, C. L. (1967) Manual of Massage and, Movement, London: Febra and Febra Ltd.
5. Rathbome, J.l. (1965) Corrective Physical education, London:

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-IV

GEC2: A. Health Education

Course Title: A. Health Education	Course code: 24PES4G2L
Total Contact Hours: 2 Hours/week	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 2 Hours
Summative Assessment Marks: 30	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. Understand the basics concepts of health education.
2. To examine the life style choices and how they impact to overall health issues
3. To enable the students to understand the various communicable diseases.
4. Understand the basics concepts of safety education.

5. To develop the skills and techniques for first aid.

GEC2: A. Health Education

Unit	Description	Hours
1	**Introduction** to Health Education: Meaning and definition of Health Education Aim, Need Importance and Scope of Health Education - role of International Organizations (WHO, UNICEF), National, State Level Health Organizations. Mental Health: Meaning of mental health - factors of mental health - mental health problem of college student - principles of mental health - characteristics of a health personality.	12
2	**Communicable Diseases:** Communicable Diseases - Causes, modes of spread - Prevention of Tuberculosis, Malaria, Small box, Chicken box and AIDS. Health Issues in India and modern diseases. Safety Education: Definition of Safety Education- factors affecting Safety Education - Need and Importance of Safety Education - Safety in Play fields, Swimming pool, Gymnasium.	10
3	**First Aid:** Definition – Need and Importance of First Aid, Principles of First Aid, - Athletic injuries: Sprain, Strain, Contusion, Fracture, Dislocation, Muscle Cramp, Abrasion and Puncture.	08

Reference

1. Wellgoose. (1977). Health Teaching in secondary Carl. E. Schools: W.B. Saunders.
2. Wilson, Kathleen J. W. (1987). Anatomy and Physiology, Health and illness. 6th Edition. Churchull Livingstone Edinburgh.
3. Anderson.T. Mc. Clerg, (1961). Human Kinetics and Analyzing Body Movements, London: William Heinman Medical Books Ltd.
4. Frank, H. &Walter, H., (1976). Turners school health education. Saint Louis: The C.V. Mosby Company.
5. Nemir, A. (n.d.). The school health education. New York: Harber and Brothers.
6. Prarce, J.W. (1984). Anatomy for students and Teachers of Physical Education, Edward Arnold & Co

Date Course Coordinator Subject Committee Chairperson

Semester-IV

GEC2: B. Yoga Education

Course Title: B. Yoga Education	Course code: 24PES4G2L
Total Contact Hours: 2 Hours/week	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 2 Hours
Summative Assessment Marks: 30	

Course Outcomes (CO's):

At the end of the course, students will be able to:

6. To appraise an understanding of the principles of yogic practices
7. To Aquitaine with various types of asanas, pranayam, kriyas
8. To integrate sports with yoga for performance enhancement
9. After completing this course, the students will able to
10. Differentiate between various paths of yoga

GEC2: B. Yoga Education

Unit	Description	Hours
1	Meaning and Definition of Yoga, Aims and Objectives of Yoga, The Yoga Sutra: General Consideration, Need and Importance of Yoga in Physical Education and Sports, Principles of yogic practitioners, The Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyan and Samadhi	12
2	Effect of Asanas and Pranayama on various system of the body, Classification of asanas with special reference to physical education and sports, Types of Kriyas, Bandas, Chakras and mudras.	10
3	Basic, applied and action research in Yoga, Difference between yogic practices and physical exercises, Yoga education centers in India and abroad, Competitions in Yogasanas. **Note: Students should gain the practical knowledge.**	08

Reference

1. Brown, F. Y. (2000). How to use yoga. Delhi: Sports Publication.
2. Gharote, M. L. & Ganguly, H. (1988). Teaching methods for yogic practices. Lonawala: Kaixydahmoe.
3. Rajjan, S. M. (1985). Yoga strengthening of relaxation for sports man. New Delhi: Allied Publishers.
4. Shankar, G. (1998). Holistic approach of yoga. New Delhi: Aditya Publishers.
5. Shekar, K. C. (2003). Yoga for health. Delhi: Khel Sahitya Kendra.

Date Course Coordinator Subject Committee Chairperson

Department of Physical Education and Sports Sciences

Semester-IV

GEC2: C. Indigenous and Folk games

Course Title: C. Indigenous and Folk games	Course code: 24PES4G2L
Total Contact Hours: 2 Hours/week	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 2 Hours
Summative Assessment Marks: 30	

Course Outcomes (CO's):

At the end of the course, students will be able to:

1. To understand the concept of indigenous and folk games and their importance.
2. Student will able to play the various indigenous and folk games.

GEC2: C. Indigenous and Folk games

Unit	Description	Hours
1	**Introduction:** Meaning definitions of Indigenous and Folk games, Need and importance of Indigenous and Folk games, Nature of Indigenous and Folk games. Indigenous and Folk games in India. Features of Traditional Games.	12
2	Types of Indigenous and Folk games, Rules and Regulations of Indigenous and Folk games, Federations/Associations of Indigenous and Folk games. Value of Indigenous and Folk games.	10

3	List of games in region vise Indigenous and Folk games, Program Planning Resources for Indigenous Traditional Games, Learning Experiences/Activities.	08

Reference

1. Kamlesh ML, Sangral MS. Principles and history of Physical Education Ludhiana: Prakash Brothers, 1994, 133-134.
2. Murry H. A History of Chess. Skyhorse Publishing. (1987). In S.A.I, Indigenous Games and Martial Arts of India New Delhi: Sports Authority of India, 2015, 91-94.
3. Sarwan S, Kissa Kabaddi da. Sangam Publications (ISBN 93-83654-65-1.)
4. Jadhav SL. A Study of Role of Yoga in Kabaddi Sport in India. World Research Journal of Physical Education and Sport Science. 2012; 1(1):04-06.
5. Tiwari SR. History of Physical Education. APH Publishing, 2006, 209-219.

Date Course Coordinator Subject Committee Chairperson

Semester-IV

DSCP: Field Activity Practical

Course Title: 1. Badminton, 2. Table Tennis, 3. Netball & 4. Cricket (any two)	Course code: 24PES4C9P
Total Contact Hours: 4 Hours of Practical	Course Credits: 02
Formative Assessment Marks: 20	Duration of ESA/Exam: 02
Summative Assessment Marks: 30	

Course Outcomes (COs):

At the end of the course, students will be able to:

1. Gain knowledge of the Game/Sport.
2. Learn the layout and marking for the Game/Sport.
3. Demonstrate various drills & lead up activities related to Game/Sport.
4. Develop the skills to teach rules, fundamentals and strategies of Game/Sport.

Field Activities Practical's:

1. BADMINTON

2. TABLE TENNIS

3. NETBALL &

4. CRICKET (ANY TWO)

Specialization Record

Unit 1 : History and development of the Game/Sport

Unit 2: Skills and Techniques

Unit 3: Strategies and Tactics

Unit 4: Officiating

Unit 5: Layout and construction and maintenance of playfield/courts

Unit 6: Organization, Administration and managerial set up for conducting tournament /competition

Unit 7: Biomechanics and Energy systems

Unit 8: Injuries and Nutrition

Note:* The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting.

Department of Physical Education and Sports Sciences

Semester-IV

Project: Research Project

Course Title: Research Project	Course code: 24PES4C1R
Total Contact Hours: 8 Hours/Week	Course Credits: 04
Formative Assessment Marks: 40	Duration of ESA/Exam: 1
Summative Assessment Marks: 60	

Course Outcomes (COs):

At the end of the course, students will be able to:

1. Identifying and selecting the problem. Defining the problem of Dissertation.
2. Making Specific and related Literature survey. (Collection of 20-30 abstracts in the area related

to the study/problem)

3. Defining the procedure and developing a methodology of/ for the study on hand.
4. Designing the study and preparation of a proposal to be justified in the colloquium.
5. Formulation of Hypothesis, Collection of Data, Analysis of data, Analysis of results, Discussion of results, Interpretation of results, drawing conclusion and making recommendations.
6. Writing of abstract and Understanding the Format of writing dissertation.
7. Proposing a model of Research problem for further Researchers.

Research Project:

1. A candidate shall have dissertation for M.P.Ed. – IV Semester and must submit his/her Synopsis and get it approved by the Head of Department on the recommendation of D.R.C. (Departmental Research Committee).
2. A candidate selecting dissertation must submit his/her dissertation not less than one week before the beginning of the IV Semester Examination.
3. The candidate has to face the Viva-Voce conducted by DRC.

CBCS 5

Disciplines Specific Core (DSC) and Discipline Specific Elective (DSE)

Paper Code: **Paper Title:**

Time: 3 Hours **Max. Marks: 70**

Note: Answer any FIVE of the following questions with Question No. 1 (Q1) Compulsory, each question carries equal marks.

Q1. 14 Marks

Q2. 14 Marks

Q3. 14 Marks

Q4. 14 Marks

Q5. 14 Marks

Note: Question No.1 to 5, one question from each unit i.e. (Unit I, Unit II, ….). The Questions may be a whole or it may consist of sub questions such as a, b, c etc…

Q6. 14 Marks

Note: Question No.6, shall be from Unit II and III, the Question may be a whole or it may consist of sub questions such as a, b, c etc…

Q7. 14 Marks

Note: Question No.7, shall be from Unit IV and V, the Question may be a whole or it may consist of sub questions such as a, b, c etc…

Q8. 14 Marks

Note: Question No-8 shall be from Unit II, Unit III, Unit IV and Unit V. The question shall have the following sub questions and weightage. i.e a – 05 marks, b – 05 marks, c – 04 marks.

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