Department of Physical Education

Programme Outcome: B.P.ED.

1. Physical Education and Sports is the study, Practice and appreciation of the Art and Science of human movement.
2. While movement is both innate and essential to an individual's growth and development, it is the role of physical education to provide instructional activities that not only promote skill development and proficiency but also enhance an individual over health.
3. Physical education not only fulfils a unique role in education but is also an integrate part of the whole education process.
4. To develop a comprehensive outlook of an individual with a strong civic position moral quality, sense of responsibilities, an independent, initiative, tolerant person who is able to successfully socialize and to use different forms of physical education and sports in daily life to protect his or her own health and promote effective professional activities.

Program Specific Outcomes (PSOs) for Bachelor of Physical Education

❖PSO-1: Understand the disciplinary content knowledge, application of pedagogical content knowledge to teaching of physical education (Content Knowledge).

❖ PSO-2: Identify and apply learner centric teaching methods.

❖ PSO-3: Apply teaching skills, managerial skills in dealing with classroom problems/situations (Pedagogical skills).

❖ PSO-4: Use effective communication skills and strategies to enhance student engagement & learning.

❖ PSO-5: Use and design variety of appropriate assessment and reflection strategies for facilitating learning (Reflection).

❖ PSO-6: Analyze Curriculum and conduct action research to solve classroom issues (Critical Thinking).

❖ PSO-7: Use appropriate technology to enhance teaching and learning and enhance personal and professional productivity (Proficiency in technology).

❖ PSO-8: Identify diverse needs, plan inclusive classroom experiences and facilitate guidance and counselling programs for differently abled students (Inclusion).

❖ PSO-9: Foster relationships and collaboration with colleagues, parents' community to support students' growth and wellbeing (Collaboration).

COURSE OUTCOMES

Semester I

CC-101 HISTORY, PRINCIPLES AND FOUNDATION OF PHYSICAL EDUCATION

CO1: Explain the historical development of physical education in India and globally, highlighting key events, pioneers, and milestones.
CO2: Understand the philosophical foundations and principles that guide physical education and their relevance to modern practices.
CO3: Analyze the contribution of physical education to personal development, national integration, and international understanding.
CO4: Identify and evaluate the objectives, scope, and importance of physical education in various educational and social contexts.
CO5: Demonstrate awareness of the interrelationship between physical education and other disciplines such as education, sociology, psychology, and health sciences.
CO6: Describe the organizational structure and role of different agencies and institutions in promoting physical education and sports.

CC-102 ANATOMY AND PHYSIOLOGY

CO1: Describe the structure and function of the human body at the cellular, tissue, organ, and system levels.
CO2: Identify and explain the anatomical organization of major body systems such as the musculoskeletal, cardiovascular, respiratory, nervous, endocrine, digestive, urinary, and reproductive systems.
CO3: Demonstrate an understanding of homeostatic mechanisms and how they regulate body function and maintain health.
CO4: Correlate anatomical structures with their physiological functions through laboratory observation and basic practical skills.
CO5: Apply anatomical and physiological knowledge to understand basic pathological changes in the human body.
CO6: Communicate anatomical and physiological concepts effectively using appropriate medical terminology.

CC-103 Health Education and Environmental Studies
CO1: Explain the concept, aims, principles, and scope of health education in individual and community health promotion.
CO2: Identify various methods and media used in health communication and educatio**n**, and demonstrate effective use of these tools..
CO3: Describe the role of health professionals in behavior change communication (BCC**)** and health education planning at the community level..
CO4: Develop and evaluate health education programs addressing specific health problems using community data.
O5: Recognize the components of the environmen**t** and their interrelationship with human health.
CO6: Identify the sources, types, and effects of environmental pollution, and outline strategies for pollution control and waste management.
CO7: Explain the importance of safe water, sanitation, and hygiene (WASH) in the prevention of communicable diseases.
CO8: Describe climate change, global warming, and biodiversity issues and their impact on health.

EC-102 OFFICIATING AND COACHING

CO1: Demonstrate knowledge of the rules and regulations of various sports and games, enabling accurate judgment and decision-making during competitions.
CO2: Develop officiating skills including use of signals, proper positioning, and conflict resolution to ensure fair and effective game management.
CO3: Design and deliver effective lesson plans for teaching different physical education activities, catering to varied age groups and skill levels.
CO4: Exhibit professionalism and ethical conduct as a teacher and official, including time management, fairness, and responsibility.
CO5: Evaluate and provide feedback to learners and athletes to improve their skills and performance in physical activities and sports.
CO6: Apply theoretical knowledge into practical contexts through active participation in organizing, conducting, and officiating games, tournaments, and teaching sessions.

SEMESTER II

CC-201 YOGA EDUCATION

CO1: Understand the philosophy and historical background of Yoga, including its origins, development, and relevance in modern life.
CO2: Demonstrate knowledge of basic yogic texts such as the Patanjali Yoga Sutras, Bhagavad Gita, and Hatha Yoga Pradipika, and their application in physical and mental well-being.
CO3: Identify and perform fundamental yogic practices, including asanas (postures), pranayama (breathing techniques), kriyas (cleansing techniques), and dhyana (meditation) with correct technique and purpose.
CO4: Explain the role of Yoga in promoting holistic health, stress management, and lifestyle-related disease prevention.
CO5: Apply yogic principles in educational and therapeutic settings for different populations including children, athletes, elderly, and individuals with special needs.
CO6: Develop and deliver structured Yoga sessions, incorporating warm-up, main practice, and relaxation techniques, with attention to safety and individual differences.
CO7: Demonstrate ethical and professional behavior in teaching Yoga, respecting cultural roots and individual limitations.

CC-202 EDUCATIONAL TECHNOLOGY AND METHODS OF TEACHING IN PHYSICAL EDUCATION.

CO1: Explain the concept, scope, and importance of educational technology in the context of physical education and sports instruction.
CO2: Understand and apply modern teaching methods and strategies (e.g., command, practice, reciprocal, inclusion, guided discovery) suitable for various physical activities.
CO3: Design and implement lesson plans using appropriate teaching aids and techniques for different levels of learners in physical education.

CO4: Utilize ICT tools (Information and Communication Technology) such as projectors, computers, smart boards, video analysis software, and online platforms to enhance teaching effectiveness.
CO5: Analyze the effectiveness of teaching methods through student feedback, peer observation, and performance outcomes, and adapt instruction accordingly.
CO6: Develop the ability to organize and manage classes effectively in both indoor and outdoor settings, ensuring safety, engagement, and discipline.
CO7: Apply principles of communication and motivation to create a positive learning environment and promote active participation in physical education.
CO8: Demonstrate the use of innovative instructional approaches including flipped classrooms, blended learning, and experiential learning in physical education contexts.

CC-203 ORGANIZATION AND ADMINISTRATION

CO1: Understand the principles and functions of organization and administration in the context of physical education, sports, and fitness institutions.
CO2: Plan, organize, and conduct sports events, physical education programs, and fitness activities effectively at school, college, and community levels.
CO3: Develop administrative skills including time management, delegation, supervision, budgeting, and resource allocation for physical education programs.
CO4: Prepare and maintain essential records and reports such as attendance registers, stock registers, time-tables, and progress reports related to sports and physical education.
CO5: Manage infrastructure and facilities (like playgrounds, gymnasiums, sports equipment) efficiently for various physical education and sports activities.
CO6: Organize intramural and extramural competitions, tournaments, and events following proper protocols, rules, and safety measures.
CO7: Apply knowledge of leadership styles and communication strategies in managing teams, volunteers, students, and support staff.
CO8: Demonstrate ethical practices and professionalism in administrative roles within physical education institutions and sports organizations.

EC- 201 CONTEMPORARY ISSUES IN PHYSICAL EDUCATION, FITNESS AND WELLNESS

CO1: Identify and analyze current trends and challenges in the field of physical education, fitness, and wellness at national and international levels.
CO2: Understand the impact of lifestyle diseases and the role of physical activity, nutrition, and mental health in promoting holistic wellness.
CO3: Evaluate policies, programs, and initiatives related to health, fitness, and physical education (e.g., Fit India Movement, Khelo India, WHO guidelines).
CO4: Demonstrate awareness of social issues such as gender equality, inclusion, and ethics in sports and physical education.
CO5: Discuss the influence of technology and media on fitness practices, physical activity patterns, and body image perceptions.
CO6: Apply wellness concepts and preventive health strategies to design individualized or group-based fitness and wellness programs.
CO7: Critically assess environmental and societal factors (e.g., urbanization, sedentary lifestyle, pollution) that affect physical activity and wellness.

CO8: Promote lifelong fitness and wellness behaviors through advocacy, education, and professional practice.

SEMESTER III

CC-301 SPORTS TRAINING

CO1: Understand the basic concepts, principles, and aims of sports training and their application to improve performance in various sports.
CO2: Explain different components of physical fitness (strength, speed, endurance, flexibility, coordination) and their role in sports performance.
CO3: Design and implement training plans (short-term, long-term, and periodized) based on the principles of training load, progression, and recovery.
CO4: Analyze and apply methods of training such as circuit training, interval training, continuous training, and technique training for different types of athletes.
CO5: Evaluate the physiological and psychological effects of training, including fatigue, overtraining, recovery, and adaptation.
CO6: Understand talent identification and development, including age-appropriate training and long-term athlete development (LTAD) models.
CO7: Use testing and monitoring tools to assess fitness, performance, and training outcomes to guide individualized training programs.
CO8: Demonstrate knowledge of injury prevention and rehabilitation strategies relevant to sports training and athlete care.

CC-302 COMPUTER APPLICATIONS IN PHYSICAL EDUCATION

CO1*:* Understand the fundamentals of computers and information technology relevant to the field of physical education and sports sciences.
CO2: Use common software applications (such as MS Word, Excel, PowerPoint) for documentation, data management, report writing, and presentations in physical education settings.
CO3: Apply spreadsheet tools for maintaining records, calculating fitness data, performance analysis, and statistical operations in sports research.
CO4: Demonstrate the use of internet and digital platforms for accessing e-learning materials, conducting online fitness sessions, and staying updated with contemporary developments in sports.
CO5: Utilize audiovisual aids and multimedia tools (such as videos, animations, smartboards) to enhance teaching and coaching effectiveness.
CO6: Analyze performance and training data using basic sports-specific software and mobile applications for biomechanics, physiology, and skill assessment.
CO7: Promote ethical use of technology and digital content, including awareness of cybersecurity, digital privacy, and academic integrity in digital environments.
CO8: Create and deliver ICT-integrated lesson plans using educational technology tools to improve learner engagement and instructional quality.

CC-303 SPORTS PSYCHOLOGY AND SOCIOLOGY

CO1: Explain the fundamental concepts of sports psychology and sports sociology, including their scope, relevance, and application in physical education and athletic performance.

CO2: Understand the psychological factors such as motivation, emotion, stress, anxiety, concentration, and personality that influence sports performance.
CO3: Apply psychological strategies and techniques (e.g., goal setting, visualization, relaxation, self-talk) to enhance athletic performance and mental well-being.
CO4: Analyze the role of social structures and institutions (e.g., family, school, peer groups, media) in shaping participation and attitudes toward sports and physical activity.
CO5: Discuss contemporary social issues in sports, including gender equity, doping, aggression, inclusion, commercialization, and cultural influences.
CO6: Evaluate the impact of group dynamics and leadership on team cohesion, performance, and communication in sports settings.
CO7: Promote positive values and ethical behavior in sport by understanding the psychological and social dimensions of fair play, teamwork, and sportsmanship.
CO8: Conduct basic psychological and sociological assessments related to sports participation, motivation, and social influence to inform teaching and coaching practices.

EC-301 SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

***CO1*:** Understand the fundamental concepts of sports medicine, including its role in the prevention, diagnosis, and management of sports-related injuries.
CO2: Identify common sports injuries (e.g., sprains, strains, fractures, dislocations) and understand their causes, symptoms, and immediate first-aid care.
CO3: Apply principles of physiotherapy in treating sports injuries through modalities such as cryotherapy, thermotherapy, electrotherapy, ultrasound, and therapeutic exercises.
CO4: Develop knowledge of rehabilitation protocols and techniques used for safe and effective recovery of athletes after injury or surgery.
CO5: Understand the role of biomechanics and posture analysis in injury prevention and performance enhancement.
CO6: Evaluate the effects of overtraining, burnout, and fatigue and apply preventive strategies to ensure athlete wellness.
CO7: Demonstrate knowledge of nutrition, hydration, and recovery techniques as part of holistic rehabilitation and performance care.
CO8: Promote safe sports participation through injury risk assessment, protective equipment, warm-up/cool-down routines, and education on sports safety.

SEMESTER IV

CC-401 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

CO1: Understand the scope and importance of sports medicine in maintaining athlete health, enhancing performance, and preventing injuries.
CO2: Identify and classify common sports injuries, including soft tissue, joint, and bone injuries, and understand their signs, symptoms, and first-aid treatment.
CO3: Explain the principles and applications of physiotherapy modalities, such as thermotherapy, cryotherapy, electrotherapy, and exercise therapy in sports injury management.
CO4: Design and implement rehabilitation programs tailored to specific injuries and phases of recovery, promoting safe return to play.

CO5: Understand the biomechanical and postural aspects related to injury prevention and performance optimization in various sports.
CO6: Apply knowledge of functional anatomy and kinesiology in diagnosing movement limitations and planning rehabilitation exercises.
CO7: Demonstrate awareness of overtraining, fatigue, and burnout, and apply strategies to reduce their impact on athletes' physical and mental well-being.
CO8: Promote athlete safety and injury prevention strategies, including proper warm-up, cool-down, use of protective equipment, and safe training practices.

CC-402 KINESIOLOGY AND BIOMECHANICS

CO1: Understand the fundamental concepts of kinesiology and biomechanics, including their roles in analyzing human movement and improving performance.
CO2: Explain the structure and function of the musculoskeletal system and its application in movement analysis and physical activity.
CO3: Apply principles of biomechanics (such as force, motion, levers, balance, and center of gravity) to assess and improve sports skills and techniques.
CO4: Analyze joint movements and muscle actions using anatomical planes and axes to better understand movement mechanics in physical activity.
CO5: Evaluate posture and body alignment, and understand their role in injury prevention, movement efficiency, and athletic performance.
CO6: Use biomechanical principles to enhance technique, reduce risk of injury, and optimize training methods in various sports and physical activities.
CO7: Demonstrate knowledge of kinesiological laws and their relevance to physical education, rehabilitation, and athletic training.
CO8: Utilize observational and measurement techniques (e.g., video analysis, goniometry, force plates) to study and correct movement patterns.

CC-403 RESEARCH AND STATISTICS IN PHYSICAL EDUCATION

CO1: Understand the fundamental concepts of research, including its types, purpose, and process, as applied to physical education and sports sciences.
CO2: Formulate research problems, hypotheses, and objectives relevant to physical activity, health, fitness, and sports performance.
CO3: Design and conduct basic research studies, including selecting appropriate research methods (qualitative and quantitative), tools, and sampling techniques.
CO4: Apply statistical techniques (e.g., mean, median, mode, standard deviation, t-test, chi-square) for organizing, analyzing, and interpreting research data.
CO5: Use data collection tools (such as questionnaires, tests, and observations) and ensure validity and reliability in the research process.
CO6: Interpret and present data effectively through tables, charts, graphs, and statistical summaries to support evidence-based conclusions.
CO7: Critically analyze research findings in physical education and sports, and apply them to practice, coaching, and policy-making.
CO8: Use basic computer applications and statistical software (e.g., MS Excel, SPSS) for data analysis and reporting in research projects.

EC-401 THEORY OF SPORTS AND GAME

CO1: Understand the fundamental skills, rules, and regulations of various individual and team sports and games.
CO2: Explain the history, development, and significance of selected sports and games at national and international levels.
CO3: Demonstrate knowledge of techniques and tactical strategies used in sports performance and competition.
CO4: Analyze the biomechanical and physiological demands of different sports and games to enhance performance and prevent injuries.
CO5: Plan and implement sport-specific training programs including skill progression, drills, and fitness components relevant to each game.
CO6: Apply appropriate teaching methods and coaching principles for developing skills and techniques in diverse learner populations.
CO7: Evaluate performance and officiate effectively by understanding and applying the rules, scoring systems, and officiating mechanics.
CO8: Promote values such as teamwork, discipline, and sportsmanship through structured teaching and participation in games and sports.

Program Outcome:

1. **Advanced Knowledge of Physical Education**: Develop an in-depth understanding of the principles, theories, and practices in physical education, sports science, and fitness management.
2. **Sporting Expertise**: Acquire specialized knowledge in various sports disciplines, including coaching techniques, strategies, and tactics, to become proficient in teaching, coaching, and training athletes.
3. **Research Skills**: Gain expertise in conducting research related to sports, fitness, health, and physical education, and contribute to the advancement of the field through evidence-based studies.
4. **Sports Management and Administration**: Learn the organizational and managerial skills necessary for running sports events, programs, and managing athletic organizations, including budgeting, marketing, and human resource management.
5. **Health and Fitness Promotion**: Equip students with the ability to design and implement fitness programs that promote physical health, mental well-being, and a healthy lifestyle among various age groups and communities.
6. **Coaching Skills**: Develop coaching techniques for different age groups and proficiency levels, focusing on enhancing the performance and skills of athletes in various sports.
7. **Knowledge of Sports Psychology**: Understand the psychological aspects of sports and physical activities, such as motivation, performance anxiety, and mental resilience, and how to apply them to improve athletes' mental preparedness and performance.
8. **Curriculum Development in Physical Education**: Learn to design effective and inclusive physical education curricula for schools, colleges, and institutions, ensuring a

comprehensive approach to fitness and wellness.

9. **Sports Nutrition and Recovery**: Gain knowledge about the role of nutrition and recovery techniques in enhancing athletic performance, and develop the ability to create nutrition plans for athletes and physically active individuals.
10. **Injury Prevention and Rehabilitation**: Understand the principles of injury prevention, first aid, and rehabilitation, and learn how to provide basic injury care and rehabilitation techniques for athletes.
11. **Leadership and Communication Skills**: Cultivate leadership abilities, teamwork, and effective communication skills to manage teams, coach athletes, and work in collaborative settings within the sports and physical education sectors.
12. **Global Sports Trends and Innovations**: Stay informed about global trends, emerging technologies, and innovations in the field of sports science, fitness, and physical education to apply contemporary practices to improve athletic and health outcomes.

These program outcomes aim to prepare students for leadership roles in sports coaching, teaching, sports management, and research, while promoting health and well-being in society through physical education.

Program Specific Outcomes (PSOs) for Master in Physical Education (MPEd)

1. Students will gain advanced knowledge in the fields of sports psychology, physiology, biomechanics, and nutrition, and will be able to apply these principles to improve athletic performance and overall physical health in various sporting contexts.
2. Graduates will develop the ability to conduct research in physical education and sports, evaluate sports performance, and assess the effectiveness of various training programs. They will be equipped to contribute to academic research and innovations in the field.
3. Students will acquire the skills required for leading and managing sports teams, organizing events, and contributing to the growth of sports at both grassroots and professional levels. This includes understanding aspects of sports administration, event management, and coaching to promote physical activity and sports at different levels.

M.P.ED.

Semester I
Theory Courses

MPCC-101 RESEARCH PROCESS IN PHYSICAL EDUCATION AND SPORTS SCIENCES

COURSE OUTCOMES ARE:

1. Students will be able to define research and describe the systematic process, methods, and stages involved in conducting research, specifically within the field of physical education and sports.
2. Students will gain an in-depth understanding of the research context within **physical education** and **sports**, recognizing how various studies contribute to the advancement of knowledge in these fields.
3. Students will understand and apply basic research methods, including **research design**, **data collection techniques**, and **data analysis** to ensure the accuracy and reliability of their research in physical education and sports.
4. Students will develop the skills to use **print and electronic library resources** effectively and ethically for literature review, data gathering, and research analysis within physical education and sports research.
5. Students will gain an understanding of **sampling techniques**, the use of **questionnaires** as data-gathering tools, and the process of conducting **surveys**, enabling them to independently design and capture relevant data for research.
6. Students will learn how to develop **testable hypotheses**, evaluate the appropriateness of research designs, interpret results, and generalize conclusions in a meaningful way based on sound research principles.

Semester I
Theory Courses

MPCC-102 PHYSIOLOGY OF EXERCISE

Course Outcomes:

1. Gain in-depth knowledge of how the body's systems (cardiovascular, respiratory, muscular, and nervous) respond and adapt to acute and chronic physical activity.
2. Understand the mechanisms of energy production during exercise, including the roles of

aerobic and anaerobic pathways, and their impact on athletic performance.

3. Analyze the role of exercise in promoting health, preventing chronic diseases, and enhancing physical and mental well-being.
4. Learn about physiological adaptations to various training regimens and how these changes improve fitness, endurance, strength, and overall performance.

5. Explore the physiological effects of exercising in extreme environments, such as heat, cold, and altitude, and strategies to manage these conditions.
6. Develop skills to assess and apply exercise physiology principles in designing training programs, optimizing performance, and planning rehabilitation protocols for athletes and individuals with specific needs.

Semester I Theory

Courses

MPCC-103 Yogic Sciences

Course Outcomes:

1. Develop a deep understanding of the philosophical, theoretical, and practical foundations of yoga, including its history, purpose, and key concepts from classical texts like the Yoga Sutras and Bhagavad Gita.
2. Enhance physical health and mental clarity through the practice of asanas (postures), pranayama (breathing techniques), and meditation, fostering holistic well-being.
3. Gain knowledge of yoga as a therapeutic tool to manage lifestyle-related disorders, including stress, anxiety, diabetes, and hypertension, by incorporating yogic techniques.
4. Develop research skills to explore the impact of yogic practices on physical, psychological, and social health, contributing to the field of yoga sciences through evidence-based studies.
5. Acquire practical skills to teach yoga confidently in diverse settings, including schools, corporate environments, and wellness centers, while promoting the importance of yoga in daily life.
6. Cultivate ethical values, discipline, and spiritual awareness by embracing the principles of yoga, fostering personal growth and a harmonious connection with society.

Semester I Theory

Courses MPEC-101

TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

(Elective)

COURSE OUTCOME:

1. It will develop a thorough understanding of the principles and concepts related to **test design** in physical education and sports, including the significance of valid, reliable, and objective testing methods.
2. It will be able to identify and apply various **measurement tools** and techniques for evaluating physical performance, fitness levels, motor skills, and overall health in physical education settings.
3. It will learn to analyze and interpret data from **fitness tests** and other performance assessments, using appropriate statistical methods to evaluate individual or group progress.
4. It will gain the ability to **evaluate physical education programs** and sporting events

using measurement and evaluation tools, ensuring that these programs are effective, efficient, and contribute to the overall development of participants.

5. It will acquire the skills to design and implement comprehensive **fitness assessments**, creating customized test batteries that suit specific needs based on age, gender, and fitness goals.
6. It will learn how to **report** and **communicate** the results of tests and evaluations effectively, providing feedback to individuals or groups in a constructive manner, and recommending interventions for improvement based on evaluation outcomes.