

## **2.6 Student Performance and Learning Outcomes**

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the web link)

### **DEPARTMENT OF PHYSICAL EDUCATION**

#### **PROGRAMME OUTCOMES**

##### **PO1.**

**Domain knowledge:** Apply the knowledge of basic sciences that may be relevant and appropriate to physical education and sports sciences leading to solution of complex sports related issues and problems.

##### **PO2.**

**Problem analysis:** Ability to Identify, define the actual requirements, formulate, research literature, and analyze complex physical education and sports sciences related problems to reaching substantiated conclusions.

##### **PO3.**

**Design/Development of Solutions:** Ability to design, implement, and evaluate process or program to meet desired needs in the field of physical education and sport sciences.

##### **PO4.**

**Individual and team work:** Ability to function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings to accomplish a common goal.

**PO5.**

**Ethics:** Understanding of professional, ethical, legal, security, social issues and responsibilities in teaching, learning and evaluation.

**PO6.**

**Communication:** Ability to communicate effectively among a range of audiences/ stakeholders

**PO7**

**Impact:** Ability to analyze the local and global impact of physical activities and sports and games on individuals, organizations and society.

**PO8**

**Professional Development:** Recognition of the need for and an ability to engage in continuing professional development

**PO9**

**Identification of Needs:** Ability to identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of physical education and sport sciences programs.

**PO10**

**Integration:** Ability to incorporate effectively integrate Science/ Technology/ IT-based solutions to applications

## **MASTER OF PHYSICAL EDUCATION (M.P.Ed.)**

### **Program Specific outcomes (PSOs)**

The Master of Physical Education(M.P.Ed.) Programme is a professional Programme meant for preparing physical education teacher for senior secondary (classes XI and XII ) level as well as assistant professor / directors / sports officers in colleges /universities and teacher educators in college of physical education and university departments of physical education. The curriculum and syllabus have been structured in such a way that each of the course meets one or more of the outcomes related to the skills, knowledge, and behaviors that students acquire as they progress through the program. Further, each course in the program spells out clear instructional objectives which are mapped to the student outcomes.

## **MASTER OF PHYSICAL EDUCATION (B. P.Ed.)**

### **Program Specific outcomes (PSOs)**

The Bachelor of Physical Education(B.P.Ed.) Programme is a professional Programme meant for preparing physical education teacher for high school (classes I to X ) level. The curriculum and syllabus have been structured in such a way that each of the course meets one or more of the outcomes related to the skills, knowledge, and behaviors that students acquire as they progress through the program. Further, each course in the program spells out clear instructional objectives which are mapped to the student outcomes.

## **MASTER OF PHYSICAL EDUCATION (M.P.Ed.)**

### **CORE PAPER – I**

#### **RESEARCH PROCESS IN PHYSICAL EDUCATION AND SPORTS SCIENCES**

##### **Learning outcomes**

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

### **CORE PAPER II**

#### **YOGIC SCIENCES**

##### **Learning outcomes**

1. Understand the basic Concepts of Yoga
2. Apply the principles of Yoga to live healthy and active life style.
3. Promote the awareness of health through yoga
4. Analyse the techniques and of body posture to bring out healthy change.
5. Develop the knowledge through practice, participate and organize.

## **CORE PAPER III**

### **TESTS, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION**

#### **Learning outcomes**

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. Apply the tests in minor research areas.
4. Analyse the performance and movements in the field of sports.
5. Evaluate the battery test and others tests prescribed by the government efficiently.

## **CORE PAPER V**

### **APPLIED STATISTICS IN PHYSICAL EDUCATION AND SPORTS**

#### **Learning outcomes**

- Understand and apply the statistics in research.
- Organize the samples and sampling techniques which is relevant to the study.
- Apply the statistics in research thesis for evaluation

## **CORE PAPER VI**

### **SPORTS BIOMECHANICS AND KINESIOLOGY**

#### **Learning outcomes**

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
4. Understand mechanical principles can be applied to the analysis of human movement to assess and improve performance and reduce risk of injury.
5. Know effectiveness of human movement using mechanical principles.

## **CORE PAPER VII**

### **SPORTS PSYCHOLOGY AND SOCIOLOGY**

#### **Learning outcomes**

1. Explain group mechanisms and group psychology in a sports context
2. Reflect upon motivational psychology as applied to sports activities
3. Formulate relevant constructs of exercise psychology
4. Demonstrate the ability to discuss sociological theories, concepts, and ideas in large and small groups and to express empirically as well as theoretically-based opinions.
5. To apply core sociological theories to specific social problems in order to analyse social problems.

## **CORE PAPER IX**

### **SPORTS MEDICINE, ATHLETIC CARE AND REHABILITATION**

#### **Learning outcomes**

1. Understand the primary responsibilities the sports trainer has in preventing sports injuries and providing initial care for injured athletes.
2. Demonstrate the basics of sport first aid during and after game situation.
3. Recognise and appropriately treat common sports injuries and conditions from onset through rehabilitation.
4. Identify and apply knowledge of anatomy to the design and execution of research studies.

## **CORE PAPER X**

### **PHYSIOLOGY OF EXERCISE**

#### **Learning outcomes**

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

## **CORE PAPER XI**

### **SCIENTIFIC PRINCIPLES OF SPORTS TRAINING**

#### **Learning outcomes**

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

## **CORE PAPER XIII**

### **INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN PHYSICAL EDUCATION**

#### **Course Outcome**

1. Understand concept of information and communication technology in physical education field
2. Analyse sporting data of various types via astute use of statistical packages.
3. Practice mathematics, statistics, information technology in sport technology related problems.
4. Offer Hands on Knowledge in information and communication Technology



## **CORE PAPER XIV**

### **SPORTS MANAGEMENT AND CURRICULUM DESIGN IN**

### **PHYSICAL EDUCATION**

#### **Course Outcome**

1. Know sports management and employ principles of strategic planning, and financial and human resource management.
2. Assess marketing needs and formulate short term and long term solutions.
3. Conceive, plan, execute, and evaluate a sports event.
4. Introduce the teaching and curriculum objectives and course module design
5. Analyze the planning strategies, teaching, learning and assessment
6. Develop strategies to promote quality learning, practice marking and consider methods of course and self-evaluation
7. Evaluating learning intentions and the process that is guided through explicit and manageable criteria.

# **B. P.Ed**

## **CORE PAPER – I**

### **HISTORY, PRINCIPLES AND FOUNDATIONS OF PHYSICAL EDUCATION**

#### **Learning Course Outcome**

1. Know the origin and development of Physical Education
2. Apply the knowledge of Olympism in organizing various sport activities.
3. Distinguish the functional operations on National and International Olympic Federations.
4. Distinguish the functional operations on National and International Olympic Federations.
5. Analyze the concepts and issues pertaining to Physical Education.
6. Formulate the principles, philosophy and concepts about Physical Education

## **CORE PAPER – II**

### **ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION**

#### **Learning Outcomes**

1. Understand the basic principles of Anatomy, Physiology and Health Education
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 anatomy and physiology and co-relate the principles of physiology.
5. Appraise the effects of health condition during the training and practical sessions

## **CORE PAPER – III**

### **YOGA EDUCATION**

#### **Learning Outcomes**

1. Understand the basic Concepts of Yoga
2. Apply the principles of Yoga to live healthy and active life style.
3. Promote the awareness of health through yoga
4. Analyze the techniques and of body posture to bring out healthy change.
5. Able to execute loosening exercise , Asanas, Pranayama and Shatkriyas.

## **CORE PAPER – V**

### **SPORTS TRAINING**

#### **Learning Outcomes**

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

## **CORE PAPER – VI**

### **ORGANIZATION, ADMINISTRATION AND METHODS IN PHYSICAL EDUCATION**

#### **Learning Outcomes**

1. Understand the principles and process of Administration and Management
2. Administer physical education and sports programs in schools.
3. Develop appropriate physical education curriculum, tools and budget to manage school programs
4. Appraise and manage physical education facilities and personnel in school
5. Design tournament fixtures and structures to organize competitions

## **CORE PAPER VII**

### **THEORIES OF SPORTS AND GAMES, COACHING AND OFFICIATING- PART I**

#### **Learning Outcomes**

1. Able to mark Track and Field and Officiate
2. Able to understand the rules of the games and sports
3. Able to give seeding and Heats in Track and Field. Combined Events .
4. Design and practice the new methods of technique of officiating.

## **CORE PAPER – IX**

### **MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION**

#### **Learning Outcomes**

1. Understand the basics of Test, Measurement and Evaluation in physical education, Health and Fitness.
2. Know about the different types of test for different sports and games.
3. Apply the tests in minor research areas.
4. Analyze the performance and movements in the field of sports.
5. Evaluate the battery test and others tests prescribed by the government efficiently.

## **CORE PAPER X**

### **RESEARCH AND STATISTICS IN PHYSICAL EDUCATION**

#### **Learning Outcomes**

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.

## **CORE PAPER XI**

### **SPORTS MANAGEMENT, RECREATION AND CAMPING**

#### **Learning Outcome**

1. Know sports management and employ principles of strategic planning, and financial and human resource management.
2. Assess marketing needs and formulate short term and long term solutions.
3. Develop critical thinking in analysing sport management issues and in managerial planning and decision making.
4. Able to organize recreational camp and activities.

## **CORE PAPER XIII**

### **THEORIES OF SPORTS AND GAMES, COACHING AND**

#### **OFFICIATING- PART II**

#### **Learning Outcomes**

1. Know the fundamental of all the games and sports
2. Understand the rules of all the games and sports
3. Preparing the students for the competition
4. Classify the students accordingly for various games and sports.
5. Design and practice the new methods of technique and training.

## **CORE PAPER XIV**

### **KINESIOLOGY AND BIOMECHANICS**

#### **Learning Outcomes**

1. Analyze and explain the mechanisms underlying biomechanical, physiological, and psychological changes that occur during after acute and chronic exercise.
2. Understand mechanical principles can be applied to the analysis of human movement to assess and improve performance and reduce risk of injury.
3. Know effectiveness of human movement using mechanical principles.

## **CORE PAPER XV**

### **SPORTS PSYCHOLOGY AND SOCIOLOGY**

#### **Learning Outcomes**

1. Explain group mechanisms and group psychology in a sports context
2. Reflect upon motivational psychology as applied to sports activities
3. Formulate relevant constructs of exercise psychology
4. Demonstrate the ability to discuss sociological theories, concepts, and ideas in large and small groups and to express empirically as well as theoretically-based opinions.
5. To apply core sociological theories to specific social problems in order to analyze social problems.

## **OLYMPIC MOVEMENT**

### **Learning Outcomes**

1. Understand the Educational and cultural values of Olympic movement.
2. Analyze the Modern Olympic Games and Rules of Eligibility for Competition.
3. Know about The organizational structure and functions of Para Olympic Games
4. Analyze the Achievement of India in Team Games and Individual Sports.

## **GENDER STUDIES**

### **Learning Outcome**

1. Able to explain and understand the concepts of gender studies
2. Able to interpret and identify the gender issues and problems

## **SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION**

### **Learning Outcome**

1. Perform and report on the exploratory analysis of data collected using sports technology
2. Analyze sporting data of various types via astute use of statistical packages.
3. Practice mathematics, statistics, information technology in sport technology related problems.
4. Support a conclusion based upon quantitative prediction, performance and analysis of a sporting team, code, or gaming environment.
5. Offer Hands on Knowledge in sports Technology



## **DISABILITY AND INCLUSIVE EDUCATION**

### **Course Outcome**

- Understand about classification of Disabilities.
- Understand adopted games for disability persons.
- Known the benefits of exercise for disability persons.

## **SPORTS NUTRITION AND WEIGHT MANAGEMENT**

### **Learning Outcomes**

1. Restate the role of nutrients and caloric requirements
2. Sketch the basic classification, functions and utilization of nutrients.
3. Point out diet for various competitions and nutrient supplements for performance.
4. Evaluate the factors affects weight management and solutions for obesity.
5. Design caloric requirements for various sports and age groups.

## **CONTEMPORARY ISSUES IN PHYSICAL EDUCATION, FITNESS**

### **AND WELLNESS**

#### **Learning Outcome**

1. Discuss research from a multidisciplinary perspective relative to current issues in physical activity and health.
2. Apply qualitative research methods to explore and critically examine a variety of curricular topics.
3. Demonstrate application of relevant research and theory to a contemporary issue in physical activity and exercise science.
4. Explain the contemporary issues and to pertaining to the physical activity and health field.

## DEPARTMENT OF YOGA

### Programme outcome: MSc in Yoga

The **Master Of Science In Yoga (MSc in Yoga )** is a **Two year** professional Programme imparting knowledge and skills about every facet of Yoga. This program has been designed for meeting the demand of the growing needs of experts in Yoga and related fields . To equip the participants to run their own Yoga Centers. To train them to introduce yoga in Schools, Colleges and Universities After successful completion of this programme, graduates will able to: Integrate and

apply **knowledge** of yoga and spiritual evolution for the practice of yoga as healthcare therapy. Design advanced yoga based therapies to meet identified needs within economic, environmental and social constraints. Recognize the need to engage in lifelong learning through continuing education and research.

- Eligible for the post of Assistant Professor
- Eligible for NET/ SET/Ph. D
- Eligible to do Research on National & International Level.
- Spiritually becomes strong.

## Course Outcome - MSc Yoga

### Semester I

Paper code	Title	Subject Outcomes
06101	Fundamentals of Yoga Education	<p>Gain knowledge about the Indian philosophy.</p> <p>Learn about the history of yoga, classical yoga texts, yogic gurus, and contributions of yoga to religions</p> <p>Understand the various paths of yoga, schools of yoga, and astanga yoga</p>
06102	Applied Anatomy and Physiology	<p>Learn about the anatomy of human body from the cell structure to the major systems of the body</p> <p>Understand the physiology, unique anatomical features, and the functions of the major systems of the body</p> <p>Insight into the effect of yogic practices on each individual systems of the body</p>
06103	Methods of Yogic Practice-I	<p>Learn about the essentials of the yogic practices</p> <p>Exposed to techniques of loosening the joints and Surya Namaskar</p> <p>Oriented to some of the preliminary asanas, pranayama, kriya, bandhas, mudras and meditation</p>

<b>Elective</b>		
06104A	Health, Fitness, Wellness and Yogic Diet	<p>Understand the meaning, definitions, dimensions, and scope of health, fitness and wellness</p> <p>Insight into the causes of illness and the management of those ill-health through yoga</p> <p>Gain knowledge about the nutrition, components of nutrition and their impact on health. Also the principles and characteristics of yogic diet are expounded</p>
<b>Practicals</b>		
06105	Applied Physiology	<p>Learn about the measurement of physiological variables such as temperature, pulse rate, respiratory rate and blood pressure</p> <p>Physical examination of sensory function and muscles is learnt</p> <p>Oriented to identify a organ specimen and explain its functions</p>
06106	Practical Training in Yoga-I	<p>Exposed to techniques of loosening the joints and Surya Namaskar</p> <p>Oriented to some of the preliminary asanas, pranayama, kriya, bandhas, mudras and meditation</p>
06107	Fitness, Wellness and Yogic Diet	<p>Orientation of aerobic exercise programmes and their relation to fitness and wellness</p> <p>Learn the preparation of naturopathy foods for health and for specific diseases.</p> <p>Study how to frame diet charts</p>

**Semester II**

06201	Introduction to Siddha and Naturopathy	<p>In-depth understanding of the history, principles, and theories of siddha and naturopathy</p> <p>Learn the various treatment modalities of diseases through siddha and naturopathy</p>
06202	Yoga and Psychology	<p>Learn about the scope of psychology in yoga and the concept of developmental psychology</p> <p>Gain an understanding in yogic psychology and spirituality</p> <p>Understand the impact of yoga on various psychological disorders</p>
06203	Methods of Yogic Practice-II	<p>Learn about the essentials of the yogic practices</p> <p>Exposed to techniques of loosening the joints and Surya Namaskar</p> <p>Oriented to some of the moderate-level asanas, pranayama, kriya, bandhas, mudras and meditation</p>

<b>Elective</b>		
06204A	Yoga and Alternative Medicine and Therapies	<p>Gain knowledge about the concepts and principles of yoga therapy, Ayurveda, siddha, naturopathy, acupuncture, acupressure, and physiotherapy</p> <p>Understand the treatment modalities in yoga therapy, Ayurveda, and siddha for life-style disorders</p>
<b>Practicals</b>		
06205	Psychological Testing in Yoga	<p>Understand various emotional states and gain competency in measuring these variables through different psychological tools</p>
06206	Practical Training in Yoga-II	<p>Exposed to techniques of loosening the joints and Surya Namaskar</p> <p>Oriented to some of the moderate-level to advanced asanas, pranayama, kriya, bandhas, mudras and meditation</p>
06207	Village Placement Programme	<p>Apply knowledge of yogic counseling and case-history taking of participants of the programme</p> <p>Gain competence in practical training and teaching of public members of a village in yogic practices</p> <p>Apply techniques of yogic therapy, alternative medicine, naturopathy, and yogic diet to the common public</p>

<b>Semester III</b>		
06301	Research Processes and Statistics in Yoga	Understand the nature and scope of research in yoga, various research methods and design, and areas of research  Gain practical competency in statistical concepts related to experimental research
06302	Computer Applications in Yoga	Develop theoretical and practical aspects of MS Word, Excel, PowerPoint and Internet  Ability to apply these applications in thesis and record preparation, and during presentations and demonstrations
06303	Methods of Yogic Practice-III	Learn about the essentials of the yogic practices Exposed to techniques of loosening the joints and Surya Namaskar Oriented to some of the moderate-level to advanced asanas, pranayama, kriya, bandhas, mudras and meditation
<b>Elective</b>		
06304A	Yoga Therapy for Common Ailments	Gain the ability to visually and physically examine, interview and perform nadi pariksha of the subjects  Ability to frame therapeutic modules of yogic practices for common disorders
<b>Practicals</b>		
06305	Computer Applications in Yoga	Gaining the ability in the hands-on application of MS word, spread sheet, power point and Internet  Ability to create and design presentations on topics  Do data gathering in the Net  Ability to generate flow charts, tables, and graphics in the documents

06306	Practical Training in Yoga-III	<p>Learn about the essentials of the yogic practices</p> <p>Exposed to techniques of loosening the joints and Surya Namaskar</p> <p>Oriented to some of the moderate-level to advanced asanas, pranayama, kriya, bandhas, mudras and meditation</p>
06307	Internship (Hospitals; Yoga, health or Naturopathy Centres)	<p>Experience in designing yogic programmes for various age groups and people with disorders</p> <p>Practical teaching of yogic practices based on the needs and requirement of the subjects</p>
<b>Semester IV</b>		
06401	Methodology of Teaching Yoga	<p>Understand the principles, scope and factors of yoga education</p> <p>Gain knowledge about the various methods in teaching yoga</p> <p>Gain competency in using teaching aids, preparing lesson plan, and organizing yoga related programmes</p>
06402	Introduction to Ayurveda	<p>Understanding the philosophy, principles, and concepts of Ayurveda</p> <p>Introduced to basic Ayurveda texts and authors</p> <p>Learn the various treatment modalities of diseases through Ayurveda</p>
06403	Methods of Yogic Practice-IV	<p>Learn about the essentials of the yogic practices</p> <p>Exposed to techniques of loosening the joints and Surya Namaskar</p> <p>Oriented to some of the moderate-level to advanced asanas, pranayama, kriya, bandhas, mudras and meditation</p>



<b>06404</b>	Thesis	<p>Acquire practical skills in systematic investigation of a research problem</p> <p>Organize the samples and sampling techniques which is relevant to the study.</p> <p>Apply the statistics in research thesis for evaluation</p> <p>Learn measurement of clinical symptoms and psychological parameters</p> <p>Organizing the data and presenting it as a thesis</p>
06405	Practical Training in Yoga-IV	<p>Learn about the essentials of the yogic practices</p> <p>Exposed to techniques of loosening the joints and Surya Namaskar</p> <p>Oriented to some of the moderate-level to advanced asanas, pranayama, kriya, bandhas, mudras and meditation</p>
<b>Teaching</b>		
06406	Teaching Practice in Yoga Centers or Educational Institutions	<p>Experience in designing yogic programmes for various age groups</p> <p>Practical teaching of yogic practices based on the needs and requirement of the subjects</p>

# **DEPARTMENT OF EXERCISE PHYSIOLOGY AND BIOMECHANICS**

## **EXERCISE PHYSIOLOGY AND NUTRITION - B.Sc**

### **Programme Specific:**

The B.Sc Exercise physiology and Nutrition offered by the Department will be on total fitness that integrates medical fitness, Nutritional Fitness, Physical, Mental and Social Fitness. The effect of Exercise on various system are given due coverage. The unique features in the internship programme offered to students at various hospital and fitness centers further the curriculum provides an insight into the importance of Nutrition, Nutrition standard, balanced diet and calorific value required for various levels of sportsmen.

### **Course Outcome:**

#### **BASIC ANATOMY & PHYSIOLOGY – I :**

By learning the subject the students will be aware of the various anatomical structures present and Physiological functions of the Human body.

#### **FOOD SCIENCE:**

Nutrients and their primary functions , Recognize common characteristics of well-nourished people , Recognize symptoms of malnutrition and nutrition assessment .

#### **KINESIOLOGY:**

To understand the various movements and muscles of the body.

#### **SPECIAL ENGLISH I (C) :**

Students can analyze a poem, prose short story and grammar .\

### **ENGLISH I :**

Students can learn theme, ideas and information from Listening from a poem, prose, short story.

### **BASIC ANATOMY & PHYSIOLOGY – II :**

By learning the subject the students will be aware of the various anatomical structures present and functions of Human body.

### **INTRODUCTION TO HUMAN NUTRITION :**

To understand Macronutrients and their primary functions and to Gain basic knowledge of the different nutrients and their role in maintaining health of the community.

### **CLINICAL EXERCISE TESTING PROCEDURES :**

On completion of this instruction students will be able to accurately screen, assess. to utilize laboratory testing that measures heart rate, blood irredeemable uptake, body co position and flexibility.

### **SPECIAL ENGLISH II (C) :**

To expose learners to short story writing over the centuries ,to provide learners an insight into different cultures and to help learners appreciate different themes, strategies and techniques employed by the writers.

### **ENGLISH-II- DEVELOPING THE LANGUAGE SKILL:**

Students can participate various speaking activates to improve their skill of speaking such as storytelling, Conversation, dialogue completing, debate .

### **KINANTHROPOMETRY :**

Accurately use anatomical and physiological terminology , Competently use and understand the principles pretentiousness procedures for assessing human body composition .

### **SPORTS NUTRITION :**

Provide individual advice and guidance in the area of sports nutrition and to design and run a group consultation for athletes about sports nutrition.

### **CLINICAL DIETETICS :**

Prepare graduates to promote health of medically complex clients through clinical residencies and special projects in clinical nutrition.

### **SPECIAL ENGLISH III (C) :**

Should be aware of the characteristics of literature as a literary genre and Should be able to pinpoint the linguistic qualities.

### **ENGLISH- III PROGRESSIVE LANGUAGE SKILL :**

Think in a logical way by identifying the fallacies in arguments and to appreciate the value of looking at an issue from various points of view without possible biases to read and comprehend the major points discussed in various types of written .

### **EXERCISE FOR SPECIAL POPULATION :**

Students will be able to define terminology related to exercise for special populations.

## **TRAINING & PERFORMANCE:**

To work with higher efficiency as Exercise Physiologist or Exercise Trainers.

## **EFFECT OF EXERCISE ON VARIOUS SYSTEM:**

It explains the various physiological factors affecting sports performance, to make recommendations for enhancing the training effect after analyzing sports training plan.

## **SPECIAL ENGLISH IV (c) :**

To enable the students to identify the specificities of various modes of prose writing and to equip them to write prose in as many different modes as possible

## **ENGLISH IV CAREER LISTENING AND SPEAKING :**

Speak English with an unaffected accent using stress and intonation

## **DSE**

## **HEALTH EDUCATION OBJECTIVES:**

To understand the concept of optimal health in developing a personal view of health. 3. The history of national disease prevention and health promotion activities.

## **STRENGTH TRAINING AND CONDITIONING:**

Interpret and Italy present knowledge of scientific literature relating to strength training.

### **NUTRITIONAL ERGOGENIC AIDS AND EXERCISE PERFORMANCE :**

Gain in depth knowledge on one nutritional ergogenic aids and to evaluate an athletes diet and make valuable nutritional recommendations that will impact his/ her sports performance.

### **WEIGHT MANAGEMENT COURSE OBJECTIVES:**

Gain an understanding of the basic elements of nutrition with a focus on the key nutrients in order to avoid deficiencies when working with weight loss clients

### **GERIATRIC SPORTS AND NUTRITION :**

Provide individual advice and guidance in the area of Geriatric sports and to Provide individual advice and guidance in the area of Geriatric nutrition.

### **FLOOR AND STEP:**

Demonstrate the ability to perform aerobic movements in various combination and forms.

## **ELEMENTARY STATISTICS IN EXERCISE PHYSIOLOGY & NUTRITION:**

To understand about the basic concepts of Statistics □ need of Statistics □ how to analysis the problem using statistics tools

## **FIRST AID AND SPORTS INJURY & PHYSIOTHERAPY :**

To know and understand the science, methods, techniques and instruments on which physiotherapy is based

LEARNING OUTCOMES: Students will able to design individual nutritional plan for old person based on prioritized problems and goals, justified intervention and outcome measures and within a specific time frame.

## **NUTRITION AND IMMUNE FUNCTION IN ATHLETES :**

Students will apply the concept of nutritional intervention to immune system of the athlete in various sports. And they will also insist the athlete to maintain the IMMUNE system for better performance.

## **FITNESS AND WELLNESS:**

Students will be able to explain the process to become physically fit and They will also understand how food affects your personal well-being and learn how to make smart choices.

## **STABILITY AND CORE TRAINING :**

Apply the core principles to exercise on a large stability cushion and to Understand how the unstable nature of the cushion challenges stability.

## **M.SC., EXERCISE PHYSIOLOGY AND NUTRITION**

### **Programme Specific :**

To train and prepare students for professional roles in promoting optimum health and wellness of individuals and diverse communication through the application and integration of exercise physiology and sports university, dietetics, sports, research and service. To conduct advanced research in areas related to nutrition and exercise physiology and mentor junior researchers who will become future thought leaders in the field. To prepare students for professional credentialing in health care vocational with emphasis in exercise physiology, nutrition and dietetics, fitness health promotion, disease prevention and related specialties.

### **BIOENERGETICS AND MUSCULAR PHYSIOLOGY:**

To provide foundational knowledge and skills of muscle physiology.

### **CARDIOVASCULAR AND RESPIRATORY PHYSIOLOGY:**

Critically evaluate the central and peripheral mechanism that regulate the cardiovascular and respiratory systems in exercise and their interactions.

### **ADVANCED HUMAN NUTRITION:**

The Physical and biological science foundation of the dietetics profession.

### **COMMUNICATION SKILLS:**

Speak English with an unaffected accent using stress and intonation.

### **NEURO PHYSIOLOGY:**

To interpret the knowledge of Neuro Physiology in athletes and in special population.



### **TRAINING AND COMPETITION NUTRITION:**

To impart knowledge on sports specific nutrition and hydration guidelines in power, strength, weight class- combat and racket sport athletes.

### **STATISTICS IN EXERCISE PHYSIOLOGY AND NUTRITION:**

The basic concept, need and to analyse using statistics tools.

### **ENVIRONMENTAL PHYSIOLOGY:**

To develop an understanding of the physiological adaptations that have evolved them to survive, adapt, participate and to train in various sports activities.

### **RESEARCH METHODOLOGY IN EXERCISE PHYSIOLOGY AND NUTRITION:**

The basic concepts, need types of research in recent trends and how to analyse the problem using statistics techniques

### **EXERCISE IN DIET PRESCRIPTION FOR SPECIAL POPULATION:**

To develop the students to become expertise in exercise testing and prescription in special population.

### **ENDOCRINOLOGY:**

The student will demonstrate an understanding of the anatomy of the endocrine . The student will demonstrate an understanding of the basic properties of hormone and the student will also demonstrate the role of the hormones in maintaining body function.

### **HEALTH FITNESS AND PERFORMANCE ASSESSMENT:**

Describe and discuss the relationship between physical activity and health and to assess the fitness variables.

### **MUSCLE AND EXERCISE METABOLISM:**

To know the importance of muscle glycogen and blood glucose for increased ATP production within contracting skeletal muscle during exercise.

### **EXERCISE BIOCHEMISTRY:**

To understand and Demonstrate technical meaning of fundamental laboratory skills by using computers to solve chemical problems.

### **RENAL PHYSIOLOGY:**

To develop and in depth understanding if of kidney physiology.

### **SUPPLEMENTS AND ERGOGENIC AIDS FPR PERFORMANCE ENHANCEMENT:**

To apply the knowledge and to describe the ill effects of ergogenic aids to athletics.

### **NUTRITIONAL PLANNING FOR SPORTS AND EXERCISE:**

The students will be proficient in planning menus with macro and micronutrients for various sports.

### **EXERCISE ASSESSMENT IN SPECIAL POPULATION:**

Become a specialized personal trainer for special population such pregnant women, children and the elderly.

### **EXERCISE AND SPORTS FOR WOMEN:**

To identify the components of fitness and communicate the relationship between physical fitness, physical performance, injury prevention and nutritional intake.

## M.Sc Sports Biomechanics and Kinesiology

### **Program Specific Objectives of Sports Biomechanics and Kinesiology**

1. To gain knowledge on anatomy and physiology, kinesiology, biomechanics, techniques of human movement and sports skills, research and statistics, and biomechanical instrumentation and measurement in 2D and 3D with inverse dynamics.
2. To apply the principles of mechanics on the human movement and sports skills to enhance the performance and reduce the risk of injury.
3. To analyse the sports skill technique/performance qualitatively and quantitatively using the biomechanical instrumentation and measurement.
4. To gain knowledge in the area of gait analysis and analyse the normal gait and pathological gait.
5. To assess the human body posture and prescribe corrective exercise to correct postural deviations.
6. To create a platform for students to engage in sports biomechanics research and pursue higher research degrees.
7. To produce an efficient sports biomechanist to work in research laboratories, sports academies, national teams, and faculty in academic institutions.
8. To produce sports performance analyst to work with sports teams/sports clubs/research labs as sports performance analyst.

## **SEMESTER I**

### **MSBCT 101 - FUNCTIONAL ANATOMY AND PHYSIOLOGY**

#### **Learning objectives:**

1. To make the students to learn the fundamental concepts and terminology of anatomy and physiology.
2. To equip the students to learn (emphasis on Musculo-skeletal system) system of the body.
3. To help them to understand the structure and the functions of the body.
4. To make them acquire a strong foundation in anatomy which will facilitate the study of biomechanics

### **MSBCT 102 - BASIC BIOMECHANICS**

#### **Learning objectives:**

1. To enable the students to learn the basic concept of biomechanics.
2. To make the students to understand kinematic and kinetic concept of human movement.
3. To equip the students to learn the principle of aerodynamic and hydrodynamics.
4. To enable the students to acquire the skills of qualitative and quantitative of human movement.

## **MSBCT 103 – DYNAMICS OF MOTOR SKILL ACQUISITIONS**

### **Learning objectives:**

1. To equip the students to understand the basic of skills acquisitions of sports performance.
2. To make them understand the basic of skills and selected sports movement pattern
3. To enable them to understand the link between motor skills, ability, learning and performance
4. To familiarize the students with various theories improving and affecting the sports skills performance

## **MSBDSE 101- MATHEMATICS IN BIOMECHANICS**

### **Learning objectives:**

1. To enable the students to learn the basic mathematics related to biomechanics.
2. To make the students to apply mathematical concepts and principles to perform computations in biomechanics.
3. To enable the students to apply mathematics to solve problem related to biomechanics.
4. To equip the students to acquire a strong mathematic foundation which facilitate in learning MATLAB and simulation and modelling.

## **MSBDSE 102 – FOUNDATIONS OF FITNESS AND EXERCISE PRESCRIPTION**

### **Learning objectives:**

1. To make the students understand the concepts of fitness
2. To equip the students to learn the tests to measure each component of fitness
3. To acquire the skills of pre exercise screening
4. To learn the principles of training
5. To equip the students to prescribe the exercise to the clients
6. To understand the fitness norms and prepare fitness report of the clients

## **SEMESTER II**

### **MSBCT 201 - KINESIOLOGY**

#### **Learning Objectives:**

1. To make students understand the in foundations of kinesiology.
2. To make them aware about the fundamental movement of human body.
3. To make them learn the role and functions of muscles.
4. To enable them to learn the exercise program to strengthen and stretch the muscles.
5. To make them to acquire a strong foundations in kinesiology.

## **MSBCT 202 – BIOMECHANICAL INSTRUMENTATION AND MESUREMENT**

### **Learning Objectives:**

1. To familiarize the students with basic electronic devices.
2. To introduce the students the basic properties of high speed cameras and calibrations.
3. To enhance their ability to assess and analyse human locomotion.
4. To provide students with a strong mechanical foundation to acquire the professional competence, knowledge and skills.
5. To study electromyography and force platform used for kinetic quantity measurement.
6. To provide knowledge about advanced equipment and their significant practical applications in biomechanics.

## **MSBCT 203 - PALPATION TECHNIQUE AND KINANTHROPOMETRY**

### **Learning objectives:**

1. To learn the palpation technique of bones, bony landmarks, skeletal muscles and tendons of human body
2. To understand the concepts of human body measurement
3. To identify the bony landmarks of human body
4. To acquire the technique of measuring human body segments length, girth, and breadth
5. To learn the technique of measuring percent body fat using skin fold measurement
6. To assess and categorize the human body into endomorph, mesomorph and ectomorph

## **MSBDSE 201-EXERCISE AND SPORT PHYSIOLOGY**

### **Learning objectives:**

1. To understand basic sports physiology and the physiological factors affecting health, fitness and performance.
2. To familiarise with knowledge of health and skill related components of physical fitness.
3. To explore how the body adapts sports & exercise activities.
4. To identify exercise needs of a person/team and design appropriate exercise interventions.

## **MSBDSE 202- PSYCHOLOGY OF SPORT PERFORMANCE**

### **Learning Objectives:**

1. To make the students familiarise with concept of psychology applied in sports performance.
2. To integrate personal relevance of the selected theories, techniques, and skills to one's own sport experiences
3. To develop an understanding of how psychological factors influence performance in sport and physical activity settings
4. To develop the ability to think critically about issues in sport and physical activity.
5. To establish a solid foundation of knowledge regarding psychological theories and research in sports setting.



## **SEMESTER III**

### **MSBCT 301-MECHANICS OF TRACK AND FIELD PERFORMANCE**

#### **Learning objectives:**

1. To equip the students to learn fundamental skills and techniques of track and field events.
2. To familiarize with mechanical principles involved in skills and technique track and field events.
3. To understand and conduct the qualitative and quantitative analysis in track and field events.
4. To acquire the skills of reviewing the current research studies.

### **MSBCT 302 - MECHANICAL ANALYSIS OF SPORTS AND GAMES – PART I**

#### **Learning objectives:**

1. To provide the acquaintance about the history of games, legends, skills and technique.
2. To recognize the mechanical principles involved in various skills of a game.
3. To acquire the skills with conducting research and evaluate the data on particular skill and technique in the relevant game.
4. To enable the students to learn to prepare standard biomechanical analysis report.

**MSBCT 303 -RESEARCH METHODS AND STATISTICAL PROCESS  
IN SPORTS SCIENCES**

**Learning objectives:**

1. To equip students with a basic concepts of research.
2. To enable the students to learn the sampling techniques.
3. To enable students to chose the most appropriate research method / design to address a particular research question.
4. To equip the students to prepare a research proposal for grants.
5. To enable the students to prepare a research thesis/report/article for a journal.
6. To enable the students to learn the basic concepts of statistics.
7. To acquire the skills of parametric and non parametric statistical methods and apply the appropriate technique for a research data analysis.

**MSBDSE 301- SPORTS TECHNOLOGY**

**Learning Objectives:**

1. To enable students to learn the fundamental of sports technology.
2. To equip the students to learn the technology used in sports.
3. To understand the different types of playfield surfaces, sports equipments and its advantages.
4. To familiarise the students with the latest technology involved in sports and games.

## **MSBDSE 302 – MATLAB**

### **Learning objectives:**

1. To enable the students understand the procedures, algorithms, and concepts require insolving specific problems.
2. To enable the students to carry out simple numerical computations and analyses usingMATLAB.
3. To familiarize the students on the basic MATLAB software.
4. To prepare the students to use MATLAB in their project works.
5. To equip the students to utilize experimental, statistical and computational methods and tools necessary for 3D motion analysis.

## **SEMESTER IV**

### **MSBCT 401-- MECHANICS OF SPORTS AND GAMES SKILLS –II**

#### **Learning Objectives:**

1. To enable the students to learn the basic skills and techniques of sports and games.
2. To learn and apply the mechanical principle on the technique of sports skill.
3. To understand the technique of qualitative and quantitative analysis.
4. To equip the students to carry out 3D analysis on sports skills and generate a valid report.

### **MSBCT 402- HUMAN GAIT**

#### **Learning objectives:**

1. Know the basic parameters of human gait
2. Characterize normal human gait
3. Know the methods of gait analysis and assessment
4. Sketch the normal ranges of motion of the various joints during a gait cycle.
5. Describe various types of pathological gait.
6. Identify causes and compensation mechanisms for pathological gait.
7. Describe measurements used in analysis of human movement.
8. Review journal papers in this field.

## **MSBCT 403- SPORTS PERFORMANCE ANALYSIS**

### **Learning Objectives:**

1. To make the students to learn the fundamental and advance strategies of performance analysis.
2. To enable the students to acquire the video capturing technique.
3. To make the students to learn and acquire the skills of using sports performance analysis software.
4. To enable the students to acquire the skills of sports performance analysis.
5. To enable the students to diagnose the strength and weakness of a player / team.
6. To create a platform for the students to choose sports performance analysis as a career.

## **MSBDSE 401- HUMAN POSTURE AND CORRECTIVE EXERCISE**

### **Learning objectives:**

1. To learn the fundamental concepts of posture.
2. To understand the correct technique of static and dynamic posture.
3. To learn the abnormal postural deviations.
4. To learn and assess the posture and its deformities and produce a postural assessment report.
5. To identify the abnormal postural deformities and suggestion of suitable corrective exercise.

## **MSBDSE 402-- MODELLING AND SIMULATION**

### **Learning objectives:**

1. To introduce basic concepts of the simulation and modeling.
2. To equip the students to develop basic simulation and modelling skills.
3. To understand the various types of simulation, techniques and methods
4. To familiarise the students with simulation modelling techniques in 3D motion analysis

## **MSBGE 101- KINESIOLOGY**

### **Learning objectives:**

1. To equip the students with foundations of kinesiology.
2. To familiarize the students with muscle origin, insertion and action.
3. To equip the students on gait analysis.
4. To enable the students to learn posture analysis.

## **MSBGE 201- SPORTS BIOMECHANICS**

### **Learning objectives:**

1. To equip the students to learn the basic of sports biomechanics.
2. To learn to apply the principle of physics in solving tasks associated with human

locomotion.

3. To learn the internal and external forces of human movement.
4. To learn the principle of aerodynamics and hydrodynamics.

# **DEPARTMENT OF SPORTS MANAGEMENT AND SPORTS**

## **PSYCHOLOGY & SOCIOLOGY**

### ***DEPARTMENT OF SPORTS MANAGEMENT***

#### ***PROGRAMME SPECIFIC OUTCOMES***

#### **Programme: PhD (Sports Management)**

The Ph.D in Sports Management is a unique program offered by the Department of Sports Management of the Tamil Nadu Physical Education and Sports University. Those who possess MBA in Sports Management Degree with research aptitude are eligible for registering this Doctoral Program. After an intensive research training program, it aims at reinforcing the fundamentals and imparting advanced training, PhD students get opportunities to pursue research on interesting topics such as issues related to sports governance, sports marketing, sports organisation development, sports infrastructure development and so on. Research papers have also been published in Journals. The training and research experience enables the graduates to successfully become academicians and researchers in organisations.

#### **Program: M BA (Sports management)**

Sports is one such fast emerging industry in India. There is a growing demand for quality, talented sports management professionals to manage players and the business surrounding it as India is emerging as the hub for professional sports. The success of major leagues with corporate sponsorships, such as ISL, PBL, IHL, Pro Kabaddi offers abundant



opportunities for economic growth and employment in the future. MBA in Sport Management is an exciting program that will help the students to develop their career in sport industry. It has been designed to meet the industry's need for well-qualified managers who can combine management and financial skills with specialist knowledge of sport. This program helps the students to acquire necessary knowledge and skills required for reflective management practice in a range of sport settings. Sports management includes business activities such as planning, organizing, directing, controlling, budgeting, client servicing.

Hospitality, marketing, sponsorships, endorsements, contract negotiations, Customer Relationship Management, analytics of data and more. This program has been offered by the Department of Sports Management since the academic year 2007-2008 onwards. This programme enables the students to explore the current trends and key concepts in sport management, to understand the dynamics of Sports Industry at the national and International Level, to develop analytical and decision-making skills, to inculcate essential business and marketing skills blended with specialized knowledge in sports management, to imbibe business ethics and values, to identify and evaluate recent changes in sport participation and policies and their implications on sports development, to inculcate the knowledge on sports governance for effectively managing sport organizations and to conduct research into sport issues relevant to managing sports and sport organizations. After the completion of M.BA in Sports Management program in two years, the students are well trained to pursue their career sports organisations at middle level management. The program introduces the students to research as an exciting career option also. A few past MBA graduates are successful entrepreneurs as well.

**COURSE OUTCOMES**  
**DEPARTMENT OF SPORTS MANAGEMENT**  
**LIST OF COURSES**

Code	Course Name
MSM101	Principles of Management
MSM102	Organizational Behavior
MSM103	Business Laws
MSM104	Managerial Economics
MSM105	Management Accounting
MSM106	Quantitative Methods in Business
MSM107	Soft Skills – I (Oral Communication)
MSM201	Operations Management
MSM202	Marketing Management
MSM203	Financial Management
MSM204	Human Resource Management
MSM205	Operations Research
MSM206	Management Information System
MSM207	Soft Skills –II  (Written Communication)
MSM301	Total Quality Management
MSM302	Strategic Management

MSM303	Research Methods in Business
MSM304	Sports Organization and Administration
MSM305	Sports Management Principles and Practices
MSM306	Sports Marketing
MSM307	Soft Skills -III (Report Writing and Presentation)
MSM308	Internship Report
MSM401	Sports Facility Management
MSM402	Sports Psychology and Sociology
MSM403	Project Work
	Viva-voce
MSM404	Village Placement Programme

## **COURSE OUTCOMES**

### **MSM101 : Principles of Management**

#### **Course outcomes:**

The course is intended to equip the students with basic managerial skills.

### **MSM102 : Organizational Behaviour**

#### **Course outcomes:**

The students would be able to understand the behavior of employees for achieving the organizational effectiveness.

### **MSM103 : Business Laws**

#### **Course outcomes:**

The students would acquire the basic knowledge of legal system of business which, indeed is very essential for running any business.

## **MSM104 : Managerial Economics**

### **Course outcomes:**

The course is intended to equip the students with knowledge on the macro and micro economic environment.

## **MSM105 : Management Accounting**

### **Course outcomes:**

The students would understand the fundamentals and significance of accounting system which would be helpful for managerial decision making.

## **MSM106 : Quantitative Methods in Business**

### **Course outcomes:**

The course is intended to impart knowledge on mathematical applications for effective decision making.

## **MSM107 : Soft Skills – I (Oral Communication)**

### **Course outcomes:**

The course is indented to develop Oral Communication skill of the students.

## **MSM201 : Operations Management**

### **Course outcomes:**

By studying this course, the students would be able to understand the functions of production and operations management.

## **MSM202 : Marketing Management**

### **Course outcomes:**

By studying this course, the students would be able to know the functions of marketing management.

## **MSM203: Financial Management**

### **Course outcomes:**

By studying this course, the students would be able to understand the needs and functions of financial management.

## **MSM204 : Human Resource Management**

### **Course outcomes:**

By studying this course, the students would be able to know the functions of human resource management.

## **MSM205 : Operations Research**

### **Course outcomes:**

The course is intended to equip the students with knowledge on optimization techniques.

## **MSM206: Management Information System**

### **Course outcomes:**

By studying this course, the students would be able to understand the different functional information systems and decision support systems in the organization.

## **MSM207 : Soft Skills -II(Written Communication)**

### **Course outcomes:**

The course is indented to develop written communication skill of the students.

## **MSM301 : Total Quality Management**

### **Course outcomes:**

The course is intended to equip the students with basic knowledge on managing total quality.



## **MSM302 : Strategic Management**

### **Course outcomes:**

By studying this course, the students would be able to understand the significance of strategies and managing strategies in an organisation.

## **MSM303 : Research Methods in Business**

### **Course outcomes:**

By studying this course, the students would be able to know the significance of conducting research and the research methods in business.

## **MSM304 : Sports Organization and Administration**

### **Course outcomes:**

By studying this course, the students would be able to understand how the sports organisations are governed at international, national and local levels.

## **MSM305 : Sports Management Principles and Practices**

### **Course outcomes:**

By studying this course, the students would be able to know the fundamental management principles and practices being followed at sports organisations.

## **MSM306 : Sports Marketing**

### **Course outcomes:**

By studying this course, the students would be able to understand and know the significance of sports marketing.

## **MSM307 : Soft Skills -III(Report Writing and Presentation)**

### **Course outcomes:**

The course is indented to develop the report writing skills and presentation skills of the students.

## **MSM308 : Internship Report**

### **Course outcomes:**

By undergoing the internship training in the organizations, the students would be able to know the different functional areas in the organization and also understand how each department in the organization functions.

## **MSM401 : Sports Facility Management**

### **Course outcomes:**

By studying this course, the students would be able to understand how to manage existing facilities and how to create new facilities.

## **MSM402 : Sports Psychology & Sociology**

### **Course outcomes:**

By studying this course, the students would be able to understand the significance of sports psychology in managing sports persons for better performance.

## **MSM403 : Project Work and Viva voce**

### **Course outcomes:**

By carrying out an intensive project work in an organization for two months, the students would be able to have hands on experience in identifying the real time problem in the organization and analyzing the same using relevant methods and reaching to logical conclusions.

## **MSM404 : Village Placement Programme**

### **Course outcomes:**

By spending one week time in the village for welfare measure, the students would be able to know the needs of the village and thereby they could understand what kind of remedial measures are required for the upliftment of the village and deliver the same..

## **DEPARMENT OF SPORTS PSYCHOLOGY AND SOCIOLOGY**

### **PROGRAM SPECIFIC OUTCOME**

#### **Programme: PhD (Sports Psychology / Sports Sociology)**

The Doctor of Philosophy (PhD) in Sports Psychology emphasizes in performance which focuses on the psychology of athletes in professions that demand excellence in Sports. This broad Sports psychology graduate program typically appeals to those looking to advance their career in various industries including sports, government or higher education institutions. After an intensive research training program, it aims at reinforcing the fundamentals and imparting advanced training, PhD students to get opportunities to pursue an cutting-edge research on interesting topics and develop new techniques . The training and research experience enables the graduates to successfully lead R&D teams in the Sports industry. Many PhD graduates are successful sports psychologists assisting the athletes to tackle their emotional issues in sports.

#### **Program : M.Phil. Sports Psychology & Sociology**

The one-year Master of Philosophy in Sports Psychology & Sociology enables the research scholars to demonstrate critical understanding, at an advanced level, of up-to-date knowledge and research methodology of a Sports Psychology/Sports Sociology. After finishing this program, students normally enroll in a Ph.D. program or they train personnel in various aspects of Sports Psychology / Sports Sociology in the Indian sports context

**Programme : M.Sc. Sports Psychology & Sociology**

The M.Sc. Sports Psychology & Sociology program of the Department of Sports Psychology and Sociology at the Tamil Nadu Physical Education and Sports University was started as a Unique Masters program in 2007. The main objective of this program would demonstrate knowledge and understanding of key theories in sports psychology and Sport Sociology, including a broad knowledge of psychological skills, strategies and techniques to facilitate performance enhancement within individuals and teams.

**Program: M.Sc. Psychology**

The two-year M.Sc.Psychology program is introduced from the academic year (2016-17). This course encourages sophisticated critical appraisal of current key debates in applied psychology. By completion of this course students will be able to demonstrate critical evaluation of psychology's contribution to human performance and well-being in different applied contexts and also develop advanced research skills in applied psychology. This course applies to a broad range of sectors and is designed for anyone wishing to understand more about the underpinning psychological research and mechanisms for employees, in organizations and business practices.

# **COURSE OUTCOME**

## **M.Sc SPORTS PSYCHOLOGY AND SOCIOLOGY**

- MSPS 101: Advanced General Psychology
- MSPS 102: Introduction to Sports Sociology
- MSPS 103: Research Methodology
- MSPS 104: Methods and Measurement in Psychology
- MSPS 104B: Sociology of Health
- MSPS 105 : Psychological Testing
- MSPS 201: Psychological Aspects of Sports Performance
- MSPS 202: Indian Social System and Sports
- MSPS 203: Social Statistics
- MSPS 204: Environmental Sociology
- MSPS 204B: Scientific Dimensions of Sports Psychology
- MSPS 301: Life Span Development
- MSPS 302: Motor Learning & Psychology of Coaching
- MSPS 303: Sociological Theories
- MSPS 304: Counseling and Behavioral Modification
- MSPS 305A: Team Cohesion and Group Dynamic
- MSPS 305B: Social Problems
- MSPS 401: Intervention Strategies and Sports Behavior
- MSPS 402: Thesis
- MSPS 403: Village Placement Program

## **M.Sc PSYCHOLOGY**

- MSPSY 101: Advanced General Psychology
- MSPSY 102: Biological Basis of Behaviour

MSPSY 103: Research Methodology  
MSPSY 104: Psychology of Advertising  
MSPSY 104B: Social Problems & Issues  
MSPSY 104C: Medical Sociology  
MSPSY 105: Psychological Testing  
MSPSY 201: Life Span Development  
MSPSY 202: Psychopathology-I  
MSPSY 203: Social Statistics & Computer Applications  
MSPSY 204: School Psychology  
MSPSY 204B: Gender & Society  
MSPSY 301: Advanced Social Psychology  
MSPSY 302: Guidance and Counselling  
MSPSY 303: Training and Development  
MSPSY 304: Psychopathology-II  
MSPSY 305A: Health Psychology  
MSPSY 305B: Urban Sociology  
MSPSY 305C: Management Principle & Practices  
MSPSY 401: Positive Psychology  
MSPSY 402: Thesis  
MSPSY 403: Village Placement Program

**M.Phil PSYCHOLOGY/ AND SOCIOLOGY**

MPHSPS101 : Research Methodology & Statistics  
MPHSPS102 : Applied Psychology  
MPHSPS201 : Area of Dissertation  
MPHSPS202 : Computer Operations, Communication & Education Skills  
MPHSPS203 : Dissertation  
MPHSPS204 : Village Placement Program



# **M.Sc Sports Psychology and Sociology**

## **MSPS 101**

### **Advanced General Psychology**

The main objective for this course is to forge connections among the different parts of the psychological scientific knowledge to improve the coherence of understanding and also to expand and integrate the knowledge of psychological science through exercising the higher levels of Bloom's cognitive taxonomy (e.g., application, analysis, synthesis, and evaluation).

## **MSPS 102**

### **Introduction to Sports Sociology**

#### **Course outcomes:**

This intended to focuses on sports as social phenomena and this area of study is concerned with various socio-cultural structures, patterns, and organizations or groups involved with sport.

## **MSPS 103**

### **Research Methodology**

#### **Course outcomes:**

It will give students a general introduction to postgraduate research, its methodologies, its challenges and its organisation. Students will be introduced to a range of research tools and will be equipped to plan and organise their research, as well as to communicate their findings.

## **MSPS 104A**

### **Methods and Measurement in Psychology**

#### **Course outcomes:**

Methods and Measurement in Psychology is the first integrative guide to theoretical, methodological, and applied aspects of multimethod measurement in psychological research.

## **MSPS 104 B**

### **Sociology of Health**

#### **Course outcomes:**

The objective of this paper is to see how social life affects morbidity and mortality rate, and vice versa.

## **MSPS 105**

### **Psychological Testing**

#### **Course outcomes:**

The students made to understand the systematic use of tests to quantify psychophysical behaviour, abilities, and problems and to make predictions about psychological performance.

## **MSPS 201**

### **Psychological aspects of Sports Performance**

#### **Course outcomes:**

It deals with the physical, psychological, and motivational factors involved with sports performance.

## **MSPS 202**

### **Indian Social System and Sports**

#### **Course outcomes:**

It enables the students to know how to build a sporting culture in India and also the socio-economic barriers in sports.

## **MSPS 203**

### **Social Statistics**

#### **Course outcomes:**

The students would be beneficial in learning **statistical** measurement systems to study human behavior in a **social** environment.

## **MSPS 204A**

### **Environmental Sociology**

#### **Course outcomes:**

The main focus would be to learn the relationships between society and the environment interactions.

## **MSPS 204B**

### **Scientific Dimensions of Sports Psychology**

#### **Course outcomes:**

Understanding the application of psychological theory and methods to the study of behavior resulting from or directly related to involvement in sport and physical activity.

## **MSPS 301**

### **Life Span Development**

#### **Course outcomes:**

The students would understand the exploration of how we change and grow from conception to death and the lifelong process that can be studied scientifically across three developmental domains: physical, cognitive, and psychosocial.

## **MSPS 302**

### **Motor Learning & Psychology of Coaching**

#### **Course outcomes:**

It enables the students to learn the processes involved in acquiring and refining skills and also by knowing basic concepts in finding the best instructional sequences and progressions to learn sport skills.

## **MSPS 303**

### **Sociological Theories**

#### **Course outcomes:**

To know the social world and enable prediction about future events.

## **MSPS 304**

### **Counseling and Behavioral Modification**

#### **Course outcomes:**

The students would learn to reduce or eliminate undesirable behaviors and teach or increase acceptable behaviours through counselling and behavioural modification.

## **MSPS 305A**

### **Team Cohesion and Group Dynamic**

#### **Course outcomes:**

This course outlines the concepts about group cohesiveness and dynamics in team sports performance.

## **MSPS 305B**

### **Social Problems**

#### **Course outcomes:**

The students would understand the consequence of factors extending beyond an individual's control, and the source of a conflicting opinion on the grounds of what is perceived as a morally just personal life or societal order.

## **MSPS 401**

### **Intervention Strategies and Sports Behavior**

#### **Course outcomes:**

The students are expected to learn the interventions showing professionals how to help athletes get the most out of their sport experience and maintain a healthy lifestyle.

## **MSPS 402**

### **Thesis**

#### **Course outcomes:**

This aimed to give confidence and some insights into pursuing research, presenting the results in the thesis, and publications.

## **MSPS 403**

### **Village Placement Programme**

#### **Course outcomes:**

VPP is compulsory for all the Regular Courses of the University. As a Part of VPP, each student of the Regular Course should stay for four days in a Village and undertake service activities such as health awareness campaign, literacy programmes, awareness programme of clean environment and safe drinking water, Sports Recreation etc., for rural development. VPP has two credits for all the Courses under CBCS.

## **M. Sc PSYCHOLOGY**

### **MSPSY 101**

#### **Advanced General Psychology**

**Course outcomes:**

It is a foundational course for students who aspire to specialize in the field of Sports Psychology in future.

### **MSPSY 102**

#### **Biological Basis of Behaviour**

**Course outcomes:**

The students would be able to understand the various biological factors that affect our behaviour and the interplay between biological processes and mental states.

### **MSPSY 103**

#### **Research Methodology**

**Course outcomes:**

Exposure to research methods gives decision makers new analytical approaches that can be applied to practical issues also they can facilitate the critical thinking process.



**MSPSY 104A**  
**Psychology of Advertising**

**Course outcomes:**

Students would be able apply and enhance their quantitative and qualitative research in a real-world environment, with potential to explore areas of ethical sensitivity and issues associated with advertising research.

**MSPSY 104B**  
**Social Problems & Issues**

**Course outcomes:**

To establish and maintain appropriate relationships and help students learn to display prosocial behavior while at school, college and beyond.

## **MSPSY 104C**

### **Medical Sociology**

#### **Course outcomes:**

The students learn the critical role social factors play in determining or influencing the health of individuals, groups, and the larger society.

## **MSPSY 105**

### **Psychological Testing**

#### **Course outcomes:**

The students made to understand the systematic use of tests to quantify psychophysical behaviour, abilities, and problems and to make predictions about psychological performance.

## **MSPSY 201**

### **Life Span Development**

#### **Course outcomes:**

The students would understand the exploration of how we change and grow from conception to death and the lifelong process that can be studied scientifically across three developmental domains: physical, cognitive, and psychosocial.

## **MSPSY 202**

### **Psychopathology-I**

#### **Course outcomes:**

This course provides the students with a method enabling them to capture the subtle nuances of the patients' experience that constitute the essentials of the “psychiatric object”.

## **MSPSY 203**

### **Social Statistics & Computer Applications**

This course Familiarizes students with the logic of behavioral statistics and the computation and interpretation of statistical analysis.

## **MSPSY 204A**

### **School Psychology**

#### **Course outcomes:**

This course enables to learn how to apply psychological science to improve the learning process and promote educational success for all students.

## **MSPSY 204B**

### **Gender & Society**

#### **Course outcomes:**

Since gender and family values are deeply embedded in the fabric of society this course gives awareness for the students to know both moral and a legal issues in gender and society.

## **MSPSY 301**

### **Advanced Social Psychology**

#### **Course outcomes:**

Students learn about human behavior in groups and that how human behavior is influenced by others. Students would understand the socio-psychological causes and motives of human behavior in groups.

## **MSPSY 302**

### **Guidance and Counselling**

**Course outcomes:**

This course provides the students to learn the main responsibility for practical arrangements of guidance and counselling belongs to the student counsellor and to help them to develop their learning-to-learn skills and capabilities for learning.

## **MSPSY 303**

### **Training and Development**

**Course outcomes:**

It enables the students to recognize the psychological assumptions made in making training and development decisions and to manage these assumptions appropriately.

## **MSPSY 304**

### **Psychopathology-II**

**Course outcomes:**

This course is designed to learn experimental approach to the study of psychopathology.

## **MSPSY 305A**

### **Health Psychology**

#### **Course outcomes:**

The students learn the practice and application of psychological methods to the study of behaviour relevant to health, illness and health care.

## **MSPSY 305B**

### **Urban Sociology**

#### **Course outcomes:**

It enables to study the structures, environmental processes, changes and problems of an urban area also it provides inputs for urban planning and policy making.

## **MSPSY 305C**

### **Management Principle & Practices**

#### **Course outcomes:**

Students examine a basic framework for understanding the role and functions of management and an explanation for the principles, concepts and techniques that can be used in carrying out these functions.

# **MSPSY 401**

## **Positive Psychology**

### **Course outcomes:**

It helps students achieve their best academic outcomes, paired with aspects from positive psychology that promote student safety and wellbeing.

# **M.PHIL SPORTS PSYCHOLOGY AND SOCIOLOGY**

## **MHPSPS 101**

### **Research Methodology & Statistics**

**Course outcomes:**

This paper aims to explain when to apply which statistical procedure, the concepts that govern these procedures, common errors when using statistics, and how to get the best analysis out of the data. Research methodology is taught as a base to explain statistical reasoning and familiarises students with commonly used software for statistical analysis.

## **MHPSPS 102**

### **Area of Specialization**

**Course outcomes:**

The area of specialization in sports psychology & Sociology provides its students with both a liberal arts education and the opportunity to explore specific areas of psychology where they have special interests.

## **MHPSPS 201**

**Course outcomes:**

### **Area of Dissertation**



This paper will be taught according to the syllabus of each students based on their dissertation topic which may have depth knowledge on various aspects of the study chosen.

## **MHPSPS 202**

### **Computer Operations, Communication & Educational Skills**

#### **Course outcomes:**

This paper enables the students to acquaint different parts of computer system and their functions → Understand the operations and use of computers and common Accessories → Develop skills of ICT and apply them in teaching learning context and Research → Acquire the knowledge of communication skill with special reference to its elements, types.

Development and styles and also understand the terms communication Technology and Computer mediated teaching and develop multimedia /e- content in their respective subject.

## **MHPSPS 203**

### **Dissertation**

#### **Course outcomes:**

This paper is to showcase the students' skills and capacity to conduct research in the chosen discipline, and present the results through an original piece of content that will provide value for the academic and scientific community.

## **MHPSPS 204**

### **Course outcomes: Village Placement Programme**

VPP is compulsory for all the Regular Courses of the University. As a Part of VPP, each student of the Regular Course should stay for four days in a Village and undertake service activities such as health awareness campaign, literacy programmes, awareness programme of clean environment and safe drinking water, Sports Recreation etc., for rural development. VPP has two credits for all the Courses under CBCS.

## **MHPSPS 205**

### **Internship**

#### **Course outcomes:**

To provide the students to gain professional work experience in a safe and structured environment with help from experts in the field of sports psychology. Typically an intern will be assigned a worksite mentor and internship coordinator. The worksite mentor will help train a student and advise him or her on how to navigate a particular worksite culture and interact with athletes.

## **PROGRAMME SPECIFIC OUTCOME**

### **DEPARTMENT OF ADVANCED TRAINING AND COACHING**

#### **Programme: Ph.D ( Sports coaching)**

Ph.D in Sports coaching is a unique programme offered by the Department of Advanced Training and coaching of the Tamil Nadu Physical Education and Sports University. Those who possess the M.Sc in Sports Coaching/M,S in sports coaching with research aptitude are eligible for registering this doctoral programme. This research aims at reinforcing the fundamentals of talent Scouting at micro level & Nurturing talent towards excellence . A new powerful way to use the scholar as an instrument of influenceandchange;awaytogrowinasystematicandscientificapproachasaperson and in confidence. Monitor and enhance Performance with a scientific evaluation system with sports science

#### **M.Phil (Sports coaching)**

M.Phil in Sports coaching is a exclusive programme offered by the Department of Advanced Training and coaching of the Tamil Nadu Physical Education and Sports University. Those who possess the M.Sc in Sports Coaching/M,S in sports coaching with research aptitude are eligible for registering this M.Phil programme. This research will Monitor and enhance the scientific slant in the field of sports with a methodical evaluation system. Logical interaction with Talent identification at micro level and nurturing talent towards excellence, Training and International Exposure with Scientific Sports Equipment and scientific personnel

### **M.Sc.,(Sports coaching)**

M.Sc in Sports coaching is a distinctive programme offered by the Department of Advanced Training and coaching of the Tamil Nadu Physical Education and Sports University. Those who possess the B.Sc Sports Coaching or its equivalent degree recognized by TNPESU with diploma/ P.G. diploma in sports coaching with sports background are eligible for admission in M.Sc programme. This course will support the coaches in sports science area and enhance the high level performance of the coaches. Develop the capacity to make reasoned decisions about sport issues. Support Training with Scientific and Sports Equipment and scientific personnel. To raise awareness for change and learning processes in organizations. To develop awareness of power and relational issues in groups and organizations. To develop intervention and collaboration skills increasing leadership capacity & skills

### **B.Sc., (Sports coaching)**

c., Sports coaching is a irreplaceable programme offered by the Department of Advanced Training and coaching of the Tamil Nadu Physical Education and Sports University. Those who possess the plus two with sports participation in the national/state/ district level are eligible for admission in B.Sc Sports coaching programme. This course will reinforce the fundamental sports sciences support with specified background. In addition to that this course emphasis the history and development, rules and regulations, technical and tactical developments of specified sport.

This course will help to develop all round personality of the student. In addition to that improve the physical, mental, moral and social well beings of the students. This course gives opportunities for higher standard of sports achievements and coaching abilities. Develop the capacity to make reasoned decisions about sport issues. This course Develops skills and fitness specific to a particular sport. Training and National exposure . To raise awareness for change and learning processes in organizations

## **Post graduate Diploma in sports coaching**

Post graduate Diploma in sports coaching is a inimitable programme offered by the Department of Advanced Training and coaching of the Tamil Nadu Physical Education and Sports University. Those who possess any degree with National/all India Inter University participation are eligible for registering this programme.

This coaching programme is an influential element of the competitive experience. The coaches are a leading positive influence on today's youth. Respondents were asked to rate the overall influence of a variety of groups on young people. Across all major demographic groups, coaches rank as the number one positive influence on youth today.

At their best, coaches can help their players improve their skills, perform to their best ability, develop strong character, and gain confidence. That is, they can maximize the positive value of sport, and they can enhance the intrinsic motivation to play sport. The intrinsic values of sport and the experience of mastery are more likely to generate fair play and good sportsmanship. Coaches who overvalue winning can create an environment in which unsportsmanlike behavior flourishes. Develop skills and fitness specific to a particular sport. To produce coaches of high caliber in different disciplines of sports to broad base sports . Training & International Exposure. Work effectively within a group toward common goals

**Department of Sports Technology**

<b>Program Outcomes</b>	<p>To impart basic concepts, skills and engineering knowledge to design and develop sports equipments, sports balls and sports goods.</p> <p>To impart knowledge on performance of players and athletes of various games and sports using engineering tools and software effectively.</p> <p>The program will help the graduates to take up responsibilities in production, testing, designing and marketing sports goods and contribute for the growth of industry.</p> <p>To make them a multidisciplinary team with sense of ethics, integrity and social responsibility</p>
<b>Programme Specific Outcome</b>	<p>After completion of the program graduates will be able to</p> <ul style="list-style-type: none"><li>A. Apply the knowledge of science, mathematics, and engineering principles for developing problem solving attitude</li> <li>B. Identify, formulate and solve engineering problems in the domain of sports engineering field.</li> <li>C. Use different software tools for Analysis and Design sports engineering domain.</li> <li>D. Design and conduct experiments, analyse and interpret data, for development of simulation experiments.</li> <li>E. Function as a member of a multidisciplinary team with sense of ethics, integrity and social responsibility</li></ul>

## Course outcomes

### Sports Aerodynamics

- To obtain the Theory and Experimental knowledge in the application of the aerodynamics in sports to design the high performance equipments and to optimize the performance of the athlete.

### Sports Materials Engineering and Design

- To apply the knowledge of material science for the design and manufacture of the different sports apparel and equipments to increase the athlete performance and to avoid the sports injury.

### Computer Aided Modeling [CAM] LAB

- To familiarise the students with the design and assemble of the sports equipments using the CAD Software.

### Sports Biomechanics

- To learn the basic idea to integrate the Medical and Engineering science to study the motion of the athlete to optimize the performance and safety.

### Measurement and Instrumentation in Sports Engineering

- To apply the knowledge of the electronic and sensor technology to measure performance of the athlete and to attain the biological data during the performance.

### Computer Aided Modeling & Analysis Lab

- To attain Numerical simulation to study the Structural, Fluid and FSI analysis of the sports apparel and equipment to confirm the safety and to optimize the sports performance.

### Sports Engineering and Technology

- To apply the recent trends of Engineering skill and technology for the development of the various sports in Comfort, Spectator Experience, Performance and safety.

### Robotics and artificial intelligence

- To be skilled in the use of the robotic technology in the manufacturing the sports equipments and the application of them in the training and tournament.
- To apply the recent trends of Artificial Intelligence to study the performance and predict the variables using machine learning.

### Physiology of Sports and Exercise

- To attain the knowledge in the athlete anatomy and biological science to apply the technology to measure and study the performance of the athlete.

### Principle and Design of Sports Turf

- To attain the knowledge in the different type of Turf and the impact affects the performance of the athlete
- To use the technology to design and develop the field and sports facility and infrastructure

### Advanced Recording and Analysing Techniques in Sports Movements

- To use video analysing technology to study biomechanics of the athlete, Gait analysis, equipment performance analysis and to study the trajectory in sports

### Composite and Nano Materials in Sports Applications

- To attain the knowledge in the application of the composite and nano materials in the sports apparel and the equipment.

### Software in Sports

- To gain the knowledge in present trending software for the analysis and prediction of the athlete performance and for sports safety.

### Survey and Construction Materials

- To attain the better sound in development of the different sports facility and the infrastructure

### Applied Biomaterial in sports technology

- To develop the knowledge in the application of different biomaterial implantation for athlete in the sports medicine.

### Commercialization of Sports

- To develop the entrepreneurship and management skill in the sport industry and government organisation.

### Sports Economic

- To attain the skill in Market, opportunity, labour relation, taxation and legal issue on sports industry.



### Sports Equipment Materials

- To attain the knowledge in the application of the different engineering materials in the manufacturing of the sports equipments.

### Application of Statistics in Sports

- To attain the skill in applying the maths especially statistics in the different sports to predict the success and maximum chance of winning technique.

### Sports Material Engineering

- To attain the knowledge in the science of the behaviour of the different materials application in the sports.

### RACE CAR VEHICLE DYNAMICS

- To attain the knowledge in the engineering technique to optimize the performance of the vehicle in motor sports.

### Soil and Ground Improvement Techniques

- To aware of the different sports surface engineering technique for the good performance of the athlete and to avoid the sports injury.

### INDUSTRIAL SAFETY

- To aware of the safety procedure during accident and the maintenance.

