



TAMILNADU PHYSICAL EDUCATION AND  
SPORTS UNIVERSITY, CHENNAI

**DEPARTMENT OF**  
**PHYSICAL EDUCATION**

# **TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY**

## **DEPARTMENT OF PHYSICAL EDUCATION**

### **B.P.ED DEGREE PROGRAMME**

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

#### **PROGRAM EDUCATIONAL OUTCOMES (PEOS)**

- PEO-1) 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.
- PEO-2) 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.

#### **PROGRAMME OUTCOMES**

- PO-1 ) 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.
- PO-2) 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.
- PO-3) 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.
- PO-4) 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.
- PO-5) Ethics: Understanding of professional, ethical, legal, security, social issues and responsibilities in teaching, learning and evaluation.
- PO-6) Communication: Ability to communicate effectively among a range of audiences/ stakeholders
- PO-7) Impact: Ability to analyze the local and global impact of physical activities and sports and games on individuals, organizations and society.
- PO-8) Professional Development: Recognition of the need for and an ability to engage in continuing professional development.

PO-9) 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.

PO-10) Integration: Ability to incorporate effectively integrate Science/Technology/ IT-based solutions to applications.

### **B15101 HISTORY, PRINCIPLES AND FOUNDATIONS OF PHYSICAL EDUCATION**

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

### **B15102 ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION**

<b>COURSE OUTCOME</b>	
CO-1	Understand the basic principles of Anatomy, Physiology and Health Education
CO-2	Apply the knowledge in the field of physical education and movement activity.
CO-3	Analyze the practical knowledge during the practical situation.
CO-4	Remember and recall the definition of anatomy and physiology and co-relate the principles of physiology.
CO-5	Appraise the effects of health condition during the training and practical sessions

### **B15103 YOGA EDUCATION**

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

## **B15201 SPORTS TRAINING**

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

## **B15202 ORGANIZATION, ADMINISTRATION AND METHODS IN PHYSICAL EDUCATION**

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

## **B15203 THEORIES OF SPORTS AND GAMES, COACHING AND OFFICIATING- PART I**

<b>COURSE OUTCOME</b>	
CO-1	Able to mark Track and Field and Officiate
CO-2	Able to understand the rules of the games and sports
CO-3	Able to give seeding and Heats in Track and Field. Combined Events .
CO-4	Design and practice the new methods of technique of officiating

## **B15301 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION**

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

**B15302 RESEARCH AND STATISTICS IN PHYSICAL EDUCATION**

<b>COURSE OUTCOME</b>	
CO-1	Identify the research problem in the field of physical Education and sports
CO-2	Know to Summarize the various research literature
CO-3	Understand and apply the basics of statistics in research.
CO-4	Organize the samples and sampling techniques which is relevant to the study
CO-5	Appraise the effects during the training and practical sessions

**M15303 SPORTS MANAGEMENT, RECREATION AND CAMPING**

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

**B15401 THEORIES OF SPORTS AND GAMES, COACHING AND OFFICIATING- PART II**

<b>COURSE OUTCOME</b>	
CO-1	Know the fundamental of all the games and sports
CO-2	Understand the rules of all the games and sports
CO-3	Preparing the students for the competition
CO-4	Classify the students accordingly for various games and sports
CO-5	Design and practice the new methods of technique and training.

**B15402 KINESIOLOGY AND BIOMECHANICS**

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

## B15403 SPORTS PSYCHOLOGY AND SOCIOLOGY

COURSE OUTCOME	
CO-1	Explain group mechanisms and group psychology in a sports context
CO-2	Reflect upon motivational psychology as applied to sports activities
CO-3	Formulate relevant constructs of exercise psychology
CO-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.
CO-5	To apply core sociological theories to specific social problems in order to analyze social problems.

### LIST OF DISCIPLINE SPECIFIC ELECTIVE

#### ODD SEMESTER

- A. Olympic Movement
- B. Gender Studies
- C. Sports Medicine, Physiotherapy and Rehabilitation.
- D. Contemporary Issues in Physical Education, Fitness and Wellness

#### EVEN SEMESTER

- A. Educational Technology and Computer Application in Physical Education
- B. Sports Nutrition and Weight Management
- C. Disability and Inclusive Education
- D. Research Project (IV Semester Only)

### OLYMPIC MOVEMENT

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

### GENDER STUDIES

COURSE OUTCOME	
CO-1	Able to explain and understand the concepts of gender studies
CO-2	Able to interpret and identify the gender issues and problems

## SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

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

## EDUCATIONAL TECHNOLOGY AND COMPUTER APPLICATION IN PHYSICAL EDUCATION

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

## DISABILITY AND INCLUSIVE EDUCATION

<b>COURSE OUTCOME</b>	
CO-1	Understand about classification of Disabilities.
CO-2	Understand adopted games for disability persons.
CO-3	Known the benefits of exercise for disability persons.

## SPORTS NUTRITION AND WEIGHT MANAGEMENT

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

## CONTEMPORARY ISSUES IN PHYSICAL EDUCATION, FITNESS AND WELLNESS

<b>COURSE OUTCOME</b>	
CO-1	Discuss research from a multidisciplinary perspective relative to current issues in physical activity and health.

CO-2	Apply qualitative research methods to explore and critically examine a variety of curricular topics.
CO-3	Demonstrate application of relevant research and theory to a contemporary issue in physical activity and exercise science.

### **EDUCATIONAL TECHNOLOGY IN PHYSICAL EDUCATION**

<b>COURSE OUTCOME</b>	
CO-1	Plan, develop, communicate, implement, and evaluate technology-infused strategic plans.
CO-2	Maintain and manage a variety of digital tools and resources for use in Technology-rich learning environment.
CO-3	Design, develop, and implement technology-rich sports program that model of sports field and promote digital age best practices playing and assessment.

### **Generic Elective**

To successfully complete the BPEd course the students must undergo and complete anyone of the generic elective (Open Elective) in the third Semester.

#### **Generic Elective Courses**

1. **CONSTRUCTION AND MAINTENANCE OF PLAY FIELDS**
  2. **TOURISM MANAGEMENT IN INDIA**
- CONSTRUCTION AND MAINTENANCE OF PLAY FIELDS**

<b>COURSE OUTCOME</b>	
CO-1	Able to Mark and Maintain Track and Field
CO-2	Able to Mark and Maintain Play Field Marking
CO-3	Able to Understand the concept of surfaces of Play Fields

### **TOURISM MANAGEMENT IN INDIA**

<b>COURSE OUTCOME</b>	
CO-1	Able to understand the Geographical units of India.
CO-2	Able to understand the International and Domestic Tourism
CO-3	Able to understand and identify the UNESCO world heritage sites in India

## **Ability and Skill Enhancement Courses:( Part IV)**

To successfully complete the BPed course the students must under go the Ability and Skill Enhancement Courses under the sub headings of Ability Enhancement Compulsory Courses (AECC) , Skill Enhancement Courses and Co-Curricular course.

### **Ability Enhancement Compulsory Courses (AECC)**

First Semester – **COMMUNICATION SKILLS**

Second Semester – a) **ENVIRONMENTAL STUDIES**

b) **SOFT SKILLS**

### **Skill Enhancement Courses (SEC)**

Third Semester - (Any one paper from the basket of choices)

**A) OBESITY AND WEIGHT MANAGEMENT**

**B) SPORTS FIRST AID**

### **COMMUNICATION SKILLS**

<b>COURSE OUTCOME</b>	
CO-1	Able to communicate better
CO-2	Able to create awareness among youth the need and importance of communication skills.
CO-3	Understands the need and importance of communication skills.

### **ENVIRONMENTAL STUDIES**

<b>COURSE OUTCOME</b>	
CO-1	Able to promote good practice to promote and preserve environment
CO-2	Able to create awareness on health problems due to environmental pollution
CO-3	Able to explain importance of environment and to create good environment.

### **SOFT SKILL**

<b>COURSE OUTCOME</b>	
CO-1	1. Developing the abilities need for better Soft skills
CO-2	Developing the skills required for attending interview and presentation skills.
CO-3	Understand and develops the qualities required for an individual development

## **OBESITY AND WEIGHT MANAGEMENT**

<b>COURSE OUTCOME</b>	
CO-1	Able to Understand the basics of Obesity and its types.
CO-2	Able to Understand the various methods of Obesity assessment and weight management

## **SPORTS FIRST AID**

<b>COURSE OUTCOME</b>	
CO-1	Able to understand the concepts of First Aid.
CO-2	Able to do various bandages and wounds
CO-3	Able to identify and recognize possibilities of sports Injuries and its management

# **TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY**

## **DEPARTMENT OF PHYSICAL EDUCATION**

### **M.P.ED DEGREE PROGRAMME**

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

#### **PROGRAM EDUCATIONAL OUTCOMES (PEOS)**

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- PEO-2) 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.

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- PO-3) 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.
- PO-4) 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.
- PO-5) Ethics: Understanding of professional, ethical, legal, security, social issues and responsibilities in teaching, learning and evaluation.
- PO-6) Communication: Ability to communicate effectively among a range of audiences/ stakeholders
- PO-7) Impact: Ability to analyze the local and global impact of physical activities and sports and games on individuals, organizations and society.

- PO-8) Professional Development: Recognition of the need for and an ability to engage in continuing professional development.
- PO-9) 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.
- PO-10) Integration: Ability to incorporate effectively integrate Science/Technology/ IT-based solutions to applications.

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

### **Learning Objectives**

1. Gain knowledge about research in the field of physical education
2. To understand the concept of sample and population
3. To testing the existing theories/trainings methods
4. To develop systematic and scientific approach in finding solutions for the questions.

### **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.

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

## **YOGIC SCIENCES**

### **Learning Objectives**

1. To understand and apply the underlying concepts of Yoga
2. To promote knowledge and awareness of skeletal alignment and body mechanics, emphasizing a safe and intelligent use of the body
3. To cultivate breath control, relaxation techniques and kinesthetic awareness

### **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 Analyze the techniques and of body posture to bring out healthy change.

<b>COURSE OUTCOME</b>	
CO-1	Understand the basic principles of Anatomy, Physiology and Health Education
CO-2	Apply the knowledge in the field of physical education and movement activity.
CO-3	Analyze the practical knowledge during the practical situation.
CO-4	Remember and recall the definition of anatomy and physiology and co-relate the principles of physiology.
CO-5	Appraise the effects of health condition during the training and practical sessions

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

### **Learning Objectives**

1. Administer a variety of tests as they apply to physical education, health and fitness.
2. Analyse and evaluate various fitness movements
3. Conduct the research Study through test and measurement

### **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. Analyze the performance and movements in the field of sports.
5. Evaluate the battery test and others tests prescribed by the government efficiently.

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

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

### **Learning Objectives**

1. Gain knowledge about statistics
2. To testing the existing theories/trainings and modifying
3. To develop systematic and scientific approach
4. Ability to interpret the data.

### **Learning outcomes**

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

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

## **SPORTS BIOMECHANICS AND KINESIOLOGY**

### **Learning Objectives**

1. Know the scientific principles of body movements
2. Know the mechanical analysis of sports
3. Know the importance of kinesiology and biomechanics to Physical Education teacher, athletes and coaches.

### **Learning outcomes**

1. Identify biomechanical, health, physiological, and psychological limitations to and interventions for improving physical performance.
2. Analyse 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.

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

### **SPORTS PSYCHOLOGY AND SOCIOLOGY**

#### **Learning Objectives**

1. To know and to understand the sportsmen behaviour.
2. To know the various psychological factors affecting sport performance.
3. To know the relationship of the sports person with society in various sports settings.

#### **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 analyses social problems.

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

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

#### **Learning Objectives**

1. By learning the subject the students will be aware of the various injury in sports.
2. The students after learning will gain knowledge about the treatment of various injury in sports.

3. After completion of this subject the students will learn how to give rehabilitation.
4. This subject will also make the student learn about prevention of injuries.

### **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.

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

## **PHYSIOLOGY OF EXERCISE**

### **Learning Objectives**

1. Understand basic knowledge of Physiology of Human body
2. Implement the knowledge in the field of physical Education
3. Demonstrate practical knowledge of basic scientific facts and principles underlying normal body structure and function

### **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

<b>COURSE OUTCOME</b>	
CO-1	Identify the research problem in the field of physical Education and sports
CO-2	Know to Summarize the various research literature
CO-3	Understand and apply the basics of statistics in research.
CO-4	Organize the samples and sampling techniques which is relevant to the study
CO-5	Appraise the effects during the training and practical sessions

## **SCIENTIFIC PRINCIPLES OF SPORTS TRAINING**

### **Learning Objectives**

1. Understand the scientific principles of sports training.
2. Fix and adopt the training load
3. Prepare the sports person for the competition

### **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

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

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

### **Learning Objectives**

1. To know the necessity of information and communication technology in physical education
2. Helps to improves the computer assisted works in sports

3. Able use the applications of computer in sports

### **Course Outcome**

1. Understand concept of information and communication technology in physical education field
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. Offer Hands on Knowledge in information and communication Technology

<b>COURSE OUTCOME</b>	
CO-1	Know the fundamental of all the games and sports
CO-2	Understand the rules of all the games and sports
CO-3	Preparing the students for the competition
CO-4	Classify the students accordingly for various games and sports
CO-5	Design and practice the new methods of technique and training.

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

### **Learning Objectives**

1. To identify the basic principles of Sports Management.
2. To know about organizational management and leadership.
3. To identify important issues and future trends in the field of sports management
4. Understand curriculum according to the needs of the students
5. Construct the curriculum for various levels
6. Update the present need which is mandatory

### **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. Analyse 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>COURSE OUTCOME</b>	
CO-1	Analyze and explain the mechanisms underlying biomechanical, physiological, and psychological changes that occur during after acute and chronic exercise.
CO-2	Understand mechanical principles can be applied to the analysis of human movement to assess and improve performance and reduce risk of injury.
CO-3	Know effectiveness of human movement using mechanical principles.

### **DISSERTATION**

1. The student shall have dissertation for M.P.Ed in IV Semester. The title and proposal shall be approved by the Guide and Head of Department/ Principal of the College.
2. The dissertation must be submitted on or before the last theory examination of the IV Semester duly signed by Guide and Head of Department / Principal of the College.
3. The format Prescribed by the University shall be followed.

### **LIST OF DISCIPLINE SPECIFIC ELECTIVE ODD SEMESTER**

Physical Fitness and Wellness  
 Sports Technology  
 Sports Engineering  
 Professional Preparation for SLET/NET in Physical Education

### **EVEN SEMESTER**

- Sports Journalism and Mass Media (or) Health

Education and Sports Nutrition.

- Value and Environmental Education (or)  
Educational Technology in Physical Education

## **PHYSICAL FITNESS AND WELLNESS**

### **Learning Objectives**

1. Promote the knowledge of physical fitness and wellness
2. Create fitness awareness among youth, various health problems and its impacts
3. Able understand the importance of physical fitness and to create good health.

### **Course Outcome**

1. Explain the history and philosophy of public physical fitness as well as its core values, concepts, and functions across the globe and in society.
2. Identify the methods, and tools of public health data collection, use, and analysis
3. Relate the underlying science of wellness and disease to opportunities for promoting and protecting health across the life course.
4. Identify the socio-economic, behavioural, biological, environmental, and other factors that impact physical fitness and contribute to health disparities.
5. Apply the principles of training and maintain a physical fitness.

<b>COURSE OUTCOME</b>	
CO-1	Explain group mechanisms and group psychology in a sports context
CO-2	Reflect upon motivational psychology as applied to sports activities
CO-3	Formulate relevant constructs of exercise psychology
CO-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.
CO-5	To apply core sociological theories to specific social problems in order to analyze social problems.

## **SPORTS TECHNOLOGY**

### **Learning Objectives**

1. To understand the procedure of selection and use of various sports technologies.
2. To learn the method of construction and installation of sports surface
3. Help to improve knowledge about modern playing equipment

### **Learning outcomes**

1. Plan, develop, communicate, implement, and evaluate technology-infused strategic plans.

2. Maintain and manage a variety of digital tools and resources for use in technology-rich sports environment
3. Design, develop, and implement technology-rich sports program that model of sports field and promote digital age best practices in teaching, playing and assessment.
4. Find out how successful were the teachers' efforts in contributing to the realization of the fundamental objectives of sports.
5. Assessments which learning experiences were effective in promoting and enhancing learning, which teaching methods and techniques are effective in the realization of the sports objectives.

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

## **SPORTS JOURNALISM AND MASS MEDIA**

### **Learning Objectives**

1. To promote the awareness of sports through journalism
2. To learn the techniques to sports organization through media
3. To know about Sports journalism and mass media contribution in sports field

### **Learning outcomes**

1. Understand the basic Journalism and Mass Media in Journalism.
2. Apply the media in sports field for promotion.
3. Promote the awareness of Sports organization and Sports Journalism.
4. Develop the knowledge through Journalism and Mass Media, participate and organize.

<b>COURSE OUTCOME</b>	
CO-1	Able to explain and understand the concepts of gender studies
CO-2	Able to interpret and identify the gender issues and problems

## HEALTH EDUCATION AND SPORTS NUTRITION

### Learning Objectives

1. Identify dietary carbohydrate and protein sources, Identify proper hydration principles and discuss the importance of hydration for physical performance
2. Demonstrate knowledge of a healthy diet for physical performance and demonstrate an ability to utilize this knowledge to complete a self-diet critique.
3. Demonstrate an understanding of health and to develop determination and values of desirable body weight

### 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 health and solutions for wellness.
5. Design caloric requirements for various sports and age groups

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

## SPORTS ENGINEERING

### Learning Objectives

1. To understand the procedure of selection and use of various sports engineering and technologies.
2. To learn the mechanics of engineering materials in sports field
3. Help to improve knowledge about building and maintain playing surface.

## Learning outcomes

1. Plan, develop, communicate, implement, and evaluate technology-infused strategic plans.
2. Maintain and manage a variety of digital tools and resources for use in technology-rich sports environment
3. Design, develop, and implement technology-rich sports program that model of sports field and promote digital age best practices playing and assessment.
4. Find out how successful were the teachers' efforts in contributing to the realization of the fundamental objectives of sports.

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

## VALUE AND ENVIRONMENTAL EDUCATION

### Learning Objectives

1. Promote the knowledge of value and environmental education.
2. Create health awareness among youth, various health problems and its impacts
3. Able understand the importance of environment and to create good environment

### Learning Outcome

1. Explain the role of values, concepts, and functions across the globe and in society.
2. Able to explain Value Education- Goal Setting- Self Efficacy and Self Esteem
- 3 Apply the principles of project implementation, including planning, assessment, and evaluation in organizational and community initiatives.

COURSE OUTCOME	
CO-1	Understand about classification of Disabilities.
CO-2	Understand adopted games for disability persons.
CO-3	Known the benefits of exercise for disability persons.

## **DISCIPLINE SPECIFIC ELECTIVE EDUCATIONAL TECHNOLOGY IN PHYSICAL EDUCATION**

### **Learning Objectives**

1. To understand the procedure of selection and use of various educational technologies.
2. To learn the method of Instructional Design
3. Help to improve new horizons of educational technology

### **Learning outcomes**

1. Plan, develop, communicate, implement, and evaluate technology-infused strategic plans.
2. Maintain and manage a variety of digital tools and resources for use in technology-rich learning environment
3. Design, develop, and implement technology-rich learning program that model principles of learning and promote digital age best practices in teaching, learning and assessment

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

## **ABILITY ENHANCEMENT COMPULSORY COURSES (AECC)**

### **HUMAN RIGHTS**

#### **Learning Objective**

1. To impart the basic ideas about human rights at post-graduation level.
2. To provide different aspects of human rights which includes children and women.
3. To learn not only the basic rights but also can understand the duties to be carried out in the days to come.

<b>COURSE OUTCOME</b>	
CO-1	Discuss research from a multidisciplinary perspective relative to current issues in physical activity and health.
CO-2	Apply qualitative research methods to explore and critically examine a variety of curricular topics.
CO-3	Demonstrate application of relevant research and theory to a contemporary issue in physical activity and exercise science.

## **ABILITY ENHANCEMENT COMPULSORY COURSES (AECC)**

### **PERSONALITY DEVELOPMENT AND LIFE COPING SKILLS**

#### **Learning Objective**

1. To impart the basic ideas about personality development.
2. To impart the basic ideas about life coping skills
3. To frame the concepts of Goal Setting

#### **Learning Outcomes**

1. Understand and develop the individual's personality development.
2. Empower the individuals in life coping skills
3. Able to frame the concepts of Goal Setting

<b>COURSE OUTCOME</b>	
CO-1	Plan, develop, communicate, implement, and evaluate technology-infused strategic plans.
CO-2	Maintain and manage a variety of digital tools and resources for use in technology-rich learning environment
CO-3	Design, develop, and implement technology-rich sports program that model of sports and promote digital age best practices playing and assessment.

## **Learning Objective**

**TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY**

**DEPARTMENT OF PHYSICAL EDUCATION**

**M. Phil DEGREE PROGRAMME**

**MASTER OF PHILOSOPHY (M.Phil)**

**PROGRAM EDUCATIONAL OUTCOMES (PEOS)**

PEO-1) The Master of philosophy in Physical Education (M.Phil) programme is meant for candidates desirous of pursuing Research programme in Physical Education and Sports and for preparing a professional cadre of Physical Education Teacher/ Educators and Directors in colleges and university departments.

PEO-2) 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.

**PROGRAMME OUTCOMES**

- PO-1 ) 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.
- PO-2) 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.
- PO-3) 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.
- PO-4) 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.

- PO-5) Ethics: Understanding of professional, ethical, legal, security, social issues and responsibilities in teaching, learning and evaluation.
- PO-6) Communication: Ability to communicate effectively among a range of audiences/ stakeholders
- PO-7) Impact: Ability to analyze the local and global impact of physical activities and sports and games on individuals, organizations and society.
- PO-8) Professional Development: Recognition of the need for and an ability to engage in continuing professional development.
- PO-9) 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.
- PO-10) Integration: Ability to incorporate effectively integrate Science/Technology/ IT-based solutions to applications

**03101**  
**RESEARCH METHODOLOGY AND**  
**STATISTICS IN PHYSICAL EDUCATION**

<b>COURSE OUTCOME</b>	
CO-1	Apply the knowledge in the field of physical education and movement activity
CO-2	Knowing design about physical education.
CO-3	Giving research report about Physical education.
CO-4	Learning about ANOVA
CO-5	Learning about ANOVA and ANCOVA (MANOVA, MANOCOVA)

**03102**  
**Area of Specialization**  
**03102 A**  
**SCIENCE OF SPORTS TRAINING AND COACHING**

<b>COURSE OUTCOME</b>	
CO-1	Training about Practice, Ground activities, Physical education
CO-2	Periodization of planning WADA
CO-3	Motor Abilities Strength about exercise
CO-4	Endurance of Methods of improvement of Co-ordinative abilities
CO-5	Coaching Methods Psychological preparation

**03102 B**  
**APPLIED YOGA**

<b>COURSE OUTCOME</b>	
CO-1	Learning about history of yoga
CO-2	About Kriyas, Asanas, Pranayamas, Mudras, Bandhas, Meditation
CO-3	Existence of Nadis, Chakras and the nervous system, yogic practices for awakening chakras
CO-4	Benefits of yoga diet, wellness, basics
CO-5	Yoga and spirituality

**03102 C**  
**SPORTS MEDICINE**

<b>COURSE OUTCOME</b>	
CO-1	Learning about Sports Injuries of Upper Limb
CO-2	Learning about Sports Injuries of Lower Limb
CO-3	Sports Injuries of Head and Neck and Trunk
CO-4	General Medical conditions
CO-5	Females Specific Sports Injuries

**03102 D**  
**EXERCISE PHYSIOLOGY AND NUTRITION**

<b>COURSE OUTCOME</b>	
CO-1	Energy work and power definition of efficiency
CO-2	Structure and functions of skeletal muscle
CO-3	About Ventilation
CO-4	Exercise and training for health and fitness, Athletic performance at attitude
CO-5	Nutrition and exercise performance and diet activities for fitness

**03102 E**  
**SPORTS PSYCHOLOGY**

<b>COURSE OUTCOME</b>	
CO-1	Introduction about Sports Psychology
CO-2	Motor Learning
CO-3	Cognitive Process in Sports
CO-4	Motivation Goal Setting Training Program
CO-5	Psychological Factors and Performance Excellence

**03102 F**  
**SPORTS SOCIOLOGY**

<b>COURSE OUTCOME</b>	
CO-1	Sociology and Sports
CO-2	Society , Culture and Sports
CO-3	Socialization and Sports
CO-4	Social stratification and Sports
CO-5	Women and sports

**03102 G**  
**SPORTS MANAGEMENT**

<b>COURSE OUTCOME</b>	
CO-1	Social Context for modern sports
CO-2	Managing Sports in the 21 <sup>st</sup> century
CO-3	The Sports Manager - Managing in the Sports Environment
CO-4	Sports organizations and Technology
CO-5	The future of sports management

**03102 H**  
**SPORTS BIOMECHANICS**

<b>COURSE OUTCOME</b>	
CO-1	Definition of Sports Biomechanics
CO-2	Linear Kinematics: Describing Objects in Linear Motion
CO-3	Explaining the Causes of Motion without Newton
CO-4	Describing Objects in Angular Motion-Angular position, velocity, acceleration-Anatomical
CO-5	Biomechanical characteristics of walking-running-Biomechanics of jumping

**03102 I**  
**SPORTS TECHNOLOGY**

<b>COURSE OUTCOME</b>	
CO-1	Introduction about Sports engineering definition, purpose, advantages and applications
CO-2	SPORTS MATERIALS Adhesives- Nano glue, nano moulding technology, Nano turf, Foot wear production
CO-3	Learning about THERMOPLASTICS in PC, PHA'S, PK, PE,PEEK, PEI, PES,PEC, PI, PLA, PMP, PPO
CO-4	About FIBRES, FERROUS METALS
CO-5	Applications in Medicine, Electronics, Space, Food, Fuel Cell, Solar Cells, Batteries, Fuels, Better Air Quality, Cleaner Water, Chemical Sensors, Sporting Goods with nano technology

### **03201**

#### **AREA OF DISSERTATION**

<b>COURSE OUTCOME</b>	
CO-1	Fundamental Concepts
CO-2	Methodology
CO-3	Research Design
CO-4	Data Collection
CO-5	Significance of Research Writing

### **03202**

#### **COMPUTER OPERATIONS, COMMUNICATIONS AND EDUCATIONAL SKILLS**

<b>COURSE OUTCOME</b>	
CO-1	Basics of Computers
CO-2	Word document
CO-3	Role of communication in the present scenario
CO-4	Soft Skills for interviews
CO-5	Pedagogy

### **03203**

#### **DISSERTATION**

### **03204**

#### **VIVA – VOCE**

**Viva – Voce will be conducted after the submission of dissertation as well as after the valuation of theory papers. The internal marks for viva- Voce is maximum of 40 and for the external. It is for the maximum of 60. Altogether for the maximum of 100 marks. Questions will be asked in the Viva – Voce examination based on the dissertation of the student.**

### **03205**

#### **VILLAGE PLACEMENT PROGRAMME**

Village Placement Programme will be organized for five days during II Semester. The assessment of the students is internal for 100 marks. Students should design programme in Physical Education and are

to teach and train villagers for five days.

**03201 A**  
**AREA OF DISSERTATION**  
**(EXPERIMENTAL STUDY)**

<b>COURSE OUTCOME</b>	
CO-1	Fundamental Concepts
CO-2	Methodology Selection of subjects
CO-3	Research Design
CO-4	Testing Hypothesis
CO-5	Significance of Research Report Writing

**03201 B**  
**AREA OF DISSERTATION**  
**(COMPARATIVE STUDY)**

<b>COURSE OUTCOME</b>	
CO-1	Meaning, need ,nature , Aim, objectives and Scope of the topic
CO-2	Justification, Apparatus and materials
CO-3	Meaning, need , Importance – Features – Types – Principles of Sampling – Population – Steps of Sampling Design
CO-4	Mean, Median, Mode and Standard Deviation. Test for difference between mean: Independent 'T' test.
CO-5	Significance of Research Report Writing – Steps in Research report Writing – Types of Reports, Mechanics of Writing a Research Report

**03201 C**  
**AREA OF DISSERTATION**  
**(RELATIONSHIP AND PREDICTION STUDIES)**

<b>COURSE OUTCOME</b>	
CO-1	Meaning, need ,nature , Aim, objectives and Scope of the topic
CO-2	Selection of subjects – variables – Justification – Scheduling – Apparatus and materials – Tests – Method of Testing
CO-3	Meaning, need , Importance – Features – Types – Principles of Sampling
CO-4	Pearson Product moment Correlation
CO-5	Significance of Research Report Writing

**03201 D**  
**AREA OF DISSERTATION**  
**(CASE STUDY)**

<b>COURSE OUTCOME</b>	
CO-1	Fundamental Concepts
CO-2	Methodology
CO-3	Research Design

CO-4	Testing Hypothesis
CO-5	Significance of Research Report Writing

**TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY  
MELAKKOTTAIYUR POST CHENNAI - 600 127**

**DEPARTMENT OF YOGA  
M.Sc., YOGA  
(Two years Regular Programme)  
CHOICE BASED CREDIT SYSTEM (CBCS)**

**PROGRAM EDUCATIONAL OBJECTIVES (PEOs)**

PEO – 1: To equip the participants to run their own Yoga Centres.

PEO – 2: To train them to introduce yoga in Schools, Colleges and Universities.

PEO – 3: 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.

PEO – 4: Design advanced yoga based therapies to meet identified needs within economic, environmental and social constraints.

**Educational Program Outcomes (POs):**

After completion of the program graduates will be able to

- PO- 1 Knowledge of the teachings and philosophy of the yoga tradition, with diverse yogic perspectives on the structure, states, functions, and conditions of the body and the mind in balance (and out of balance), based on teachings of the Yoga Sutras, the Bhagavad Gita, and other relevant texts.
- PO- 2 Ability to teach or deliver the appropriate practices for individuals and/or groups, using multimodal strategies of education such as auditory, visual, and kinaesthetic learning tools, and tools that foster client engagement.
- PO- 3 Advanced knowledge of generally accepted ethical principles of health care and yoga codes of conduct; in depth knowledge of legal and regulatory issues (including current relevant local, state, and national laws).
- PO- 4 Knowledge of the fundamental value of ongoing personal practice, long-term mentorship, and skills maintenance/development through continuing education, including knowledge of when and how to seek advice and support for case consultation, educational advancement, and personal practice
- PO- 5 Ability to apply knowledge learned in this curriculum to assess the needs of the

individuals, to design and implement effective programs, and to assess the effectiveness of these programs.

**PROGRAM SPECIFIC OUTCOMES (PSO)**

The post graduates are able to

**PSO 1** Gain knowledge and skills necessary to meet the demand of the growing needs of experts in yoga and related fields.

**PSO-2** Eligible to do Research on National & International Level.

<b>PYO18CT101</b>	<b>FUNDAMENTALS OF YOGA</b>
	<p><b>COURSE OUTCOME:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Gain knowledge about the Indian philosophy.</li> <li>• CO2 - Learn about the history of yoga, classical yoga texts, yogic gurus, and contributions of yoga to religions</li> <li>• CO3 - Understand the various paths of yoga, schools of yoga, and Ashtanga yoga</li> </ul>

<b>PYO18CT102</b>	<b>ANATOMY AND PHYSIOLOGY</b>
	<p><b>COURSE OUTCOME:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Learn about the anatomy of the human body from the cell structure to the major systems of the body</li> <li>• CO2 - Understand the physiology, unique anatomical features, and the functions of the major systems of the body</li> <li>• CO3 - Insight into the effect of yogic practices on each individual systems of the body</li> </ul>

<b>PYO18CT103</b>	<b>YOGIC PRACTICE</b>
	<p><b>COURSE OUTCOME:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Learn about the essentials of the yogic practices</li> <li>• CO2 - Exposed to techniques of loosening the joints and Surya Namaskar</li> <li>• CO3 - Oriented to some of the preliminary asanas, pranayama, kriya, bandhas, mudras and meditation</li> </ul>

<b>DSE PYO18DE001</b>	<b>YOGA AND HEALTH</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Understand the Indian concept of health, development and causes of disease, mental and emotional well-being, and role of yogic attitudes toward health</li> <li>• CO2 - In-depth knowledge about communicable diseases</li> <li>• CO3 - Gain knowledge about the lifestyle diseases, the role of yoga in combating them, and impact of diet and nutrition in disease prevention and curing</li> <li>• CO4 - Exposure on current trends in health and environment, concepts of hygiene and health, and population explosion and its control</li> <li>• CO5 - Learn about the yogic principles and practices for health, fitness, and wellness</li> </ul>

<b>PY018AE101</b>	<b>COMMUNICATION SKILLS</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Understand the basic characteristics of communication and its role in society</li> <li>• CO2 - Learn about the types of verbal and non-verbal communication</li> <li>• CO3 - Training on written communication</li> <li>• CO4 - Orientation on the soft skills to excel in the interview</li> <li>• CO5 - Learn the skills of group discussion.</li> </ul>

<b>PY018EC101</b>	<b>VILLAGE PLACEMENT PROGRAMME</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Apply knowledge of yogic counselling and case-history taking of participants of the programme</li> <li>• CO2 - Gain competence in practical training and teaching of public members of a village in yogic practices</li> <li>• CO3 - Apply techniques of yogic therapy, alternative medicine, naturopathy, and yogic diet to the common public</li> </ul>

<b>PRACTICAL PYO18CL101</b>	<b>YOGIC PRACTICES-I</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Exposed to techniques of loosening the joints and Surya Namaskar</li> <li>• CO2 - Oriented to some of the preliminary asanas, pranayama, kriya, bandhas, mudras and meditation</li> </ul>

<b>Practical PYO18CL102</b>	<b>APPLIED PHYSIOLOGY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the measurement of physiological variables such as temperature, pulse rate, respiratory rate and blood pressure</li> <li>• CO2 - Physical examination of sensory function and muscles is learned</li> <li>• CO3 - Oriented to identify an organ specimen and explain its functions.</li> </ul>

<b>PYO18CT201</b>	<b>YOGA AND PSYCHOLOGY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the scope of psychology in yoga and the concept of developmental psychology</li> <li>• CO2 - Gain an understanding in yogic psychology and spirituality</li> <li>• CO3 - Understand the impact of yoga on various psychological disorders</li> </ul>

<b>PYO18CT202</b>	<b>METHODOLOGY OF TEACHING YOGA</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Understand the principles and methodology of teaching yoga</li> <li>• CO2 - Learn about the presentation techniques and teaching aids to yoga learning</li> <li>• CO3 - Exposed to preparing and executing a lesson plan</li> <li>• CO4 - Understand the processes in organizing and conducting workshops, camps, games and competition are learned.</li> </ul>

<b>Practical PYO18CL201</b>	<b>PSYCHOLOGICAL TESTING IN YOGA</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Understand various cognitive and emotional states and gain competency in measuring these variables through different psychological tools</li> </ul>

<b>Practical PYO18CL202</b>	<b>YOGIC PRACTICE -II</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Exposed to techniques of loosening the joints and Surya Namaskar</li> <li>• CO2 – Oriented to some of the moderate-level to advanced asanas, pranayama, kriya, bandhas, mudras and meditation</li> </ul>

<b>PYO18CT301</b>	<b>YOGA THERAPY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Gain the ability to visually and physically examine, interview and suggest suitable yogic practices to subjects based on the principles of yoga therapy</li> <li>• CO2 – Understand the concepts of Ayurveda, Siddha, Naturopathy and other allied therapies and their application</li> <li>• CO3 - Ability to frame therapeutic modules of yogic practices for lifestyle disorders, psychological disorders and disorders specific to women</li> </ul>

<b>PYO18CT302</b>	<b>HATHA YOGA TEXTS</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Exposed to various Hatha yoga texts, their unique features and their contribution</li> <li>• CO2 – In-depth study on the asanas, pranayama, mudras, bandhas, and meditation in classical Hatha Yoga texts</li> </ul>

<b>PYO18CT303</b>	<b>TRADITIONAL SYSTEMS OF MEDICINE &amp; THERAPIES</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 -Understand the principles and philosophy of important Ayurveda texts</li> <li>• CO2 -Gain knowledge about the Ayurvedic purification practices and Ayurvedic diet</li> <li>• CO3 –Understand the principles of Siddha medicine and treatment for lifestyle disorders</li> <li>• CO4 -Various alternative therapies and nature cure treatment approaches are learned</li> </ul>

<b>PYO18DE005</b>	<b>METHODS OF NATUROPATHY</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Gain an understanding of the principles, philosophy and modalities of naturopathy</li> <li>• CO2 – Learn about the therapeutic naturopathy treatments such as mud therapy, hydrotherapy, steam bath and diet and their application for common disorders</li> </ul>

<b>PYO18GE301</b>	<b>STRESS MANAGEMENT</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Understand the concepts, types and remedies of stress</li> <li>• CO2 – Learn about the yogic approach to stress management</li> <li>• CO3 - Gain an insight on the impact of stress management on psychosomatic disorders and mental health</li> </ul>

<b>PYO18AE301</b>	<b>PERSONALITY DEVELOPMENT</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Learn about the concepts and developmental processes of personality</li> <li>• CO2 - Understand the role of yoga, diet and stress management in developing the personality.</li> <li>CO3 - Gain insight into the development of leadership qualities and career development</li> </ul>

<b>PYO18AE301</b>	<b>PERSONALITY DEVELOPMENT</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the concepts and developmental processes of personality</li> <li>• CO2 - Understand the role of yoga, diet and stress management in developing the personality.</li> <li>• CO3 - Gain insight into the development of leadership qualities and career development</li> </ul>

<b>Co-curricular PYO18EC301</b>	<b>INTERNSHIP HOSPITALS OR HEALTH CENTERS OR YOGA OR NATUROPATHY CENTRES</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Experience in designing yogic programmes for various age groups and people with disorders</li> <li>• CO2 – Practical teaching of yogic practices based on the needs and requirement of the subjects</li> </ul>

<b>PRACTICAL PYO18CL301</b>	<b>YOGIC PRACTICES-III</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 – Learn the methods of loosening the joints and types of suryanamaskar</li> <li>• CO2 – Learn techniques of some of the moderate-to advanced level asanas, pranayama, kriya, bandhas, mudras and meditation</li> </ul>

<b>Practicals PYO18CL302</b>	<b>CLINICAL APPLICATIONS IN YOGA THERAPY</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Gain knowledge about the causes, symptoms, and predisposing factors of various diseases</li> <li>• CO2 - Learn about the principles and application of various diagnostic and therapeutic tools of yoga therapy</li> <li>• CO3 - Understand the methodology and application of nadi pariksha for therapeutic intervention</li> <li>• CO4 - Learn techniques of modifying asanas, pranayama, meditation and chanting in therapeutic intervention</li> <li>• CO5 - Study the application of therapeutic yogic modules for disorders of the major systems of the body</li> </ul>

<b>PYO18CT401</b>	<b>RESEARCH PROCESS IN YOGA</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Understand the nature and scope of research in yoga, various research methods and design, and areas of research</li> <li>• CO2 – Learn to prepare a research proposal, formulate hypothesis, and implement research design and sampling</li> <li>• CO3 - Learn to write research report and synopsis</li> <li>• CO4 - Gain practical competency in statistical concepts related to experimental research</li> </ul>

<b>PYO18CT402</b>	<b>YOGA SUTRAS</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Understand the philosophy, principles, concepts and commentaries of Yoga Sutra</li> <li>• CO2 - In-depth study of Samadhi Pada, Sadhana Pada, Vibhuti Pada and Kaivalya Pada.</li> </ul>

<b>PYO18CT403</b>	<b>THESIS</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Acquire practical skills in a systematic investigation of a research problem</li> <li>• CO2 - Organize the samples and sampling techniques which is relevant to the study</li> <li>• CO3 – Apply the statistics in research thesis for evaluation</li> <li>• CO4 – Learn measurement of clinical symptoms and psychological parameters</li> <li>• CO5 – Organizing the data and presenting it as a thesis</li> </ul>

<b>PRACTICAL PYO18CL401</b>	<b>YOGA PRACTICES – IV</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Learn about the essentials of the yogic practices</li> <li>• CO2 - Exposed to techniques of loosening the joints and advanced Surya Namaskar.</li> <li>• CO3 - Oriented to some of the advanced level of asanas, pranayama, kriya, bandhas, mudras and meditation</li> </ul>
<b>PRACTICAL PTO18CL402</b>	<b>CLINICAL APPLICATIONS IN TRADITIONAL SYSTEMS OF MEDICINES AND THERAPIES</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Develop the ability to visually and physically examine, interview and perform nadi pariksha of the subjects</li> <li>• CO2 - Gain knowledge about the concepts and principles of yoga therapy, Ayurveda, and siddha, naturopathy, acupuncture, acupressure, and Physiotherapy.</li> <li>• CO3 - Understand the treatment modalities in yoga therapy, Ayurveda, and siddha for life-style disorders, psychological disorders, and disorders specific to women</li> </ul>

<b>Discipline Specific Elective</b> <b>PYO18DE008</b>	<b>STATISTICS IN YOGA</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the types of data and the measures of central tendency and variability</li> <li>• CO2 - Understand normal distribution and testing of hypothesis through T test, ANOVA, correlation, and non-parametric tests</li> <li>• CO3 - Gain ability to present data through graphical representations.</li> </ul>

<b>Skill-enhancement course</b> <b>PYO18SE401</b>	<b>ENVIRONMENTAL STUDIES</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1- Raises awareness about the environment, natural resources and social issues that affect environment</li> <li>• CO2 - Learn about the causes and effects of environmental pollution and means to control it</li> <li>• CO3 - Understand the impact of various social issues and population growth on the environment</li> </ul>

**TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY**  
**MELAKKOTTAIYUR POST CHENNAI - 600 127**

**DEPARTMENT OF YOGA**  
**M.Sc., YOGA THERAPY**  
**(Two years Regular Programme)**  
**CHOICE BASED CREDIT SYSTEM (CBCS)**

**Programme Educational Objectives (PEO)**

- PEO-1 Graduate will have successful academic and research career.
- PEO-2 Graduates will have employment in public and private sectors and resolve health, economic, social and environmental issues.

**PROGRAM EDUCATIONAL OBJECTIVES (POs)**

PO – 1: Knowledge of classical and theoretical foundations of the field of Yoga Therapy

PO – 2: Knowledge of classical theories of health and disease relevant to the practice of Yoga Therapy

PO – 3: Knowledge of human anatomy, physiology and biomechanics, and the interrelationships between systems of the body

PO – 4: Knowledge of common pathologies and disorders of systems of the body, including familiarity with symptoms, condition management, illness trajectories, and related contraindications to yoga practices

PO – 5: Ability to communicate using common medical and psychological terminology,

PEO – 6: Knowledge of models of human development, with the influence of familial, social, religious and cultural conditioning on health and healing

PO – 7: Knowledge of the interconnections between the body, the breath, the mind, and the emotions in the context of maintaining resilience and well-being

PO – 8: Ability to communicate effectively, to establish healthy therapeutic and professional relationships, and to implement effective teaching methods by adapting to unique styles of learning, providing supportive and effective feedback while evaluating and acknowledging the progress of the client

PO – 9: The skill to conduct an intake and assessment of the client and elicit the priorities and goals of the client; to integrate information from the intake, evaluation, and observation to develop

a working assessment of the client's condition, limitations, and possibilities;

PO – 10: The skill to determine which aspects of the client’s conditions, goals, and aspirations might be addressed through Yoga Therapy

PO – 11: Advanced knowledge of diverse Yoga Therapy tools and practices and their appropriate application, with practices that may include asana or postures, pranayama (or regulated breathing) meditation and relaxation techniques, and lifestyle modifications, including basic yogic dietary concepts; and the knowledge of when to apply these practices and when they are contraindicated

PO – 12: Critical thinking skills and science-based literacy to advance the evolution of Yoga Therapy as an integrative health practice

PO – 13: Integrate and apply knowledge of yoga and spiritual evolution for the practice of yoga as healthcare therapy.

PO – 14: Install the intellectual skills to analyze and solve healthcare disorders through designing specific yoga therapies.

<b>PYT18CT101</b>	<b>FUNDAMENTALS OF YOGA THERAPY</b>
	<p><b>COURSE OUTCOME:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Gain knowledge about the goals, principles and philosophy of yoga therapy.</li> <li>• CO2 - Learn about the history, evolution and foundations of yoga therapy</li> <li>• CO3 – Understand the meaning, definitions, dimensions, and scope of health, fitness and wellness</li> <li>• CO4 – Insight into the causes of illness and the management of those ill-health through yoga</li> <li>• CO5 – Gain knowledge about the nutrition, components of nutrition and their impact on health. Also the principles and characteristics of the yogic diet are expounded</li> </ul>
<b>PYT18CT102</b>	<b>FUNCTIONAL ANATOMY AND PHYSIOLOGY</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Learn about the anatomy of the human body from the cell structure to the major systems of the body</li> <li>• CO2 - Understand the physiology, unique anatomical features, and the functions of the major systems of the body</li> <li>• CO3 - Insight into the effect of yogic practices on each individual systems of the body</li> </ul>

<b>PYT18CT103</b>	<b>BASIC PRINCIPLES OF YOGA THERAPY</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Gain an insight into viniyoga and its application for people of different life-stages</li> <li>• CO2 - Understand and develop an ability to apply principles and concepts of yoga cikitsa in health management</li> <li>• CO3 - Develop the ability to frame course planning and progression</li> <li>• CO4 - Gain knowledge about the concepts and principles of Ayurveda, siddha, naturopathy, acupuncture, acupressure, physiotherapy and other alternative medical systems</li> </ul>

<b>DSE PYT18DE001</b>	<b>HEALTH AND YOGA THERAPY</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Understand the Indian concept of health, development and causes of disease, mental and emotional well-being, and role of yogic attitudes toward health</li> <li>• CO2 - In-depth knowledge about communicable diseases</li> <li>• CO3 - Gain knowledge about the lifestyle diseases, the role of yoga in combating them, and impact of diet and nutrition in disease prevention and curing</li> <li>• CO4 - Exposure on current trends in health and environment, concepts of hygiene and health, and population explosion and its control.</li> <li>• CO5 - Learn about the yogic principles and practices for health, fitness, and wellness.</li> </ul>

<b>PYT18AE101</b>	<b>COMMUNICATION SKILLS</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Understand the basic characteristics of communication and its role in society</li> <li>• CO2 - Learn about the types of verbal and non-verbal communication</li> <li>• CO3 - Training on written communication</li> <li>• CO4 - Orientation on the soft skills to excel in the interview</li> <li>• CO5 - Learn the skills of group discussion.</li> </ul>

<b>PYT18EC101</b>	<b>VILLAGE PLACEMENT PROGRAMME</b>
	Duration : Five days Date : During 1 <sup>st</sup> Year Mode of evaluation : Internal Assessment Maximum Marks : 100 Subject : Yoga Therapy Nature of Program : To teach and train villagers
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Apply knowledge of yogic counselling and case-history taking of participants of the programme</li> <li>• CO2 - Gain competence in practical training and teaching of public members of a village in yogic practices</li> <li>• CO3 - Apply techniques of yogic therapy, alternative medicine, naturopathy, and yogic diet to the common public</li> </ul>

<b>PRACTICAL PYT18CL101</b>	<b>YOGIC PRACTICES AND MODIFICATIONS -I</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Exposed to techniques of loosening the joints and Surya Namaskar</li> <li>• CO2 - Oriented to some of the preliminary asanas, pranayama, kriya, bandhas, mudras and meditation</li> </ul>

<b>Practical PYT18CL102</b>	<b>APPLIED PHYSIOLOGY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the measurement of physiological variables such as temperature, pulse rate, respiratory rate and blood pressure</li> <li>• CO2 - Physical examination of sensory function and muscles is learned</li> <li>• CO3 - Oriented to identify an organ specimen and explain its functions</li> </ul>

<b>PYT18CT201</b>	<b>YOGA THERAPY AND PSYCHOLOGY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the scope of psychology in yoga and the concept of developmental psychology</li> <li>• CO2 - Gain an understanding in yogic psychology and spirituality</li> <li>• CO3 - Understand the impact of yoga on various psychological disorders</li> </ul>
<b>PYT18CT202</b>	<b>PHYSICAL EXAMINATION METHODS OF YOGA THERAPY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Physical examination of spine, joints, abdomen, sensory function and muscles is learnt</li> </ul>
<b>PYT18CT203</b>	<b>METHODOLOGY IN YOGA THERAPY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Gain the ability to identify the symptoms and causes of diseases</li> <li>• CO2 - Learn the methodology of visually and physically examine, interview and perform nadi pariksha of the subjects</li> <li>• CO3 - Ability to apply suitable therapeutic tools and modifications of yogic practices during therapeutic intervention is gained</li> </ul>

### **PYT18DE002 NUTRITION AND YOGA THERAPY**

#### **COURSE OUTCOMES:**

- CO1 - Learn about macro and micronutrients and various diets and their application
- CO2 - Gain an understanding of yogic diet as prescribed in classical texts
- CO3 - Understand nutritional requirements during various life stages
- CO4 – Nutritional therapy for infectious and lifestyle disease is learned.

<b>Generic</b>	<b>YOGIC PRACTICES</b>
<b>PYT18GE201</b>	
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the essentials of the yogic practices</li> <li>• CO2 – Exposed to techniques of loosening the joints and Surya Namaskar for children</li> <li>• CO3 - Oriented to some of the moderate-level asanas, pranayama, kriya, bandhas, mudras and meditation</li> </ul>

<b>PYT18SE201</b>	<b>COMPUTER APPLICATIONS</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Develop theoretical and practical aspects of MS Word, Excel, PowerPoint and Internet</li> <li>• CO2 – Ability to apply these applications in thesis and record preparation, and during presentations and demonstrations</li> </ul>
<b>PYT18EC201</b>	<b>TEACHING PRACTICE IN EDUCATIONAL INSTITUTIONS</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Experience in designing yogic programmes for various age groups</li> <li>• CO2 – Practical teaching of yogic practices based on the needs and requirement of the subjects</li> </ul>
<b>PYT18CL201</b>	<b>PSYCHOLOGICAL TESTING</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Understand various cognitive and emotional states and gain competency in measuring these variables through different psychological tools</li> </ul>
<b>Practical PYT18CL202</b>	<b>YOGIC PRACTICE AND MODIFICATIONS –II</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Exposed to techniques of loosening the joints and Surya Namaskar</li> <li>• CO2 – Oriented to some of the moderate-level to advanced asanas, pranayama, kriya, bandhas, mudras and meditation</li> </ul>
<b>PYT18CT301</b>	<b>TEXT IN YOGA THERAPY</b>
	<p><b>COURSE OUTCOMES:</b></p> <ul style="list-style-type: none"> <li>• CO1 - Learn about Vedas and principle Upanishads.</li> <li>• CO2 - Understand important concepts and tenets of Bagavad Gita and Yoga Vashista</li> <li>• CO3 - In-depth study and understanding of the concepts and philosophy of basic hatha yoga texts, Ayurveda texts, and Indian philosophy</li> <li>• CO4 - Understand the yoga therapy techniques and approaches as defined by the modern Hatha Yoga texts</li> </ul>

<b>PYT18CT302</b>	<b>PATHOLOGY AILMENTS AND YOGA THERAPY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the Allopathic and yogic pathology of diseases</li> <li>• CO2 - Ability to asses and prescribe yoga therapy for important diseases</li> <li>• CO3 - Gain knowledge about the yogic intervention specific to major systems of the body and their respective ailments</li> </ul>
<b>PYT18CT303</b>	<b>TRADITIONAL SYSTEMS OF MEDICINE &amp; THERAPIES</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Understand the principles and philosophy of important Ayurveda texts.</li> <li>• CO2 - Gain knowledge about the Ayurvedic purification practices and Ayurvedic diet</li> <li>• CO3 – Understand the principles of Siddha medicine and treatment for lifestyle disorders</li> <li>• CO4 - Various alternative therapies and nature cure treatment approaches are learned</li> </ul>

<b>PYT18DE005</b>	<b>METHODS OF NATUROPATHY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Gain an understanding of the principles, philosophy and modalities of naturopathy</li> <li>• CO2 – Learn about the therapeutic naturopathy treatments such as mud therapy, hydrotherapy, steam bath and diet and their application for common disorders</li> </ul>
<b>PYT18GE301</b>	<b>STRESS MANAGEMENT</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Understand the concepts, types and remedies of stress.</li> <li>• CO2 – Learn about the yogic approach to stress management.</li> <li>• CO3 - Gain an insight on the impact of stress management on psychosomatic disorders and mental health.</li> </ul>

<b>PYT18AE301</b>	<b>PERSONALITY DEVELOPMENT</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the concepts and developmental processes of personality</li> <li>• CO2 - Understand the role of yoga, diet and stress management in developing the personality.</li> <li>• CO3 - Gain insight into the development of leadership qualities and career development</li> </ul>

<b>Co-curricular</b> <b>PYT18EC301</b>	<b>INTERNSHIP</b> <b>HOSPITALS OR HEALTH CENTERS OR YOGA OR NATUROPATHY CENTRES</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Experience in designing yogic programmes for various age groups and people with disorders</li> <li>• CO2 – Practical teaching of yogic practices based on the needs and requirement of the subjects</li> </ul>
<b>PRACTICAL</b> <b>PYT18CL301</b>	<b>YOGIC PRACTICES AND MODIFICATIONS-III</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 – Learn about the essentials of the yogic practices</li> <li>• CO2 – Exposed to techniques of loosening the joints and Surya Namaskar</li> <li>• CO3 - Oriented to some of the moderate-level to advanced asanas, pranayama, kriya, bandhas, mudras and meditation</li> </ul>
<b>Practicals</b> <b>PYO18CL302</b>	<b>CLINICAL APPLICATION IN TRADITIONAL INDIAN SYSTEMS OF MEDICINE AND THERAPIES</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Gain practical knowledge about the concepts and principles of yoga therapy, Ayurveda, and siddha, naturopathy, acupuncture, acupressure, physiotherapy, and their clinical application for diseases</li> <li>• CO2 - Understand the treatment modalities in yoga therapy, Ayurveda, and siddha for life-style disorders, psychological disorders, and disorders specific to women</li> </ul>
<b>PYO18CT401</b>	<b>RESEARCH PROCESS IN YOGA THERAPY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Understand the nature and scope of research in yoga, various research methods and design, and areas of research.</li> <li>• CO2 – Learn to prepare a research proposal, formulate hypothesis, and implement research design and sampling</li> <li>• CO3 - Learn to write research report and synopsis</li> <li>• CO4 - Gain practical competency in statistical concepts related to experimental research</li> </ul>

<b>PYO18CT402</b>	<b>YOGA THERAPY IN YOGA SUTRAS</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Understand the philosophy, principles, concepts and commentaries of Yoga Sutra</li> <li>• CO2 - In-depth study of Samadhi Pada, Sadhana Pada, Vibhuti Pada and Kaivalya Pada with specific importance to the therapeutic application</li> </ul>

<b>PYT18CT403</b>	<b>THESIS</b>
	<b>YOGA PRACTICES AND MODIFICATIONS – IV</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the essentials of the yogic practices</li> <li>• CO2 - Exposed to techniques of loosening the joints and advanced Surya Namaskar</li> <li>• CO3 - Oriented to some of the advanced level of asanas, pranayama, kriya, bandhas, mudras and meditation</li> </ul>
<b>PYT18CT403</b>	<b>THESIS</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Acquire practical skills in a systematic investigation of a research problem</li> <li>• CO2 - Organize the samples and sampling techniques which is relevant to the study</li> <li>• CO3 – Apply the statistics in research thesis for evaluation</li> <li>• CO4 – Learn measurement of clinical symptoms and psychological parameters</li> <li>• CO5 – Organizing the data and presenting it as a thesis</li> </ul>
	<b>YOGA PRACTICES AND MODIFICATIONS – IV</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the essentials of the yogic practices</li> <li>• CO2 - Exposed to techniques of loosening the joints and advanced Surya Namaskar</li> <li>• CO3 - Oriented to some of the advanced level of asanas, pranayama, kriya, bandhas, mudras and meditation</li> </ul>

<b>PRACTICAL PYT18CL402</b>	<b>CLINICAL APPLICATIONS IN TRADITIONAL SYSTEMS OF MEDICINE AND YOGA THERAPY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 – Gain practical knowledge about the causes, symptoms, and predisposing factors of various diseases</li> </ul>
	<ul style="list-style-type: none"> <li>• CO2 – Learn about the principles and application of various diagnostic and therapeutic tools of yoga therapy</li> <li>• CO3 – Understand the methodology and application of nadi pariksha for therapeutic intervention</li> <li>• CO4 – Learn techniques of modifying asanas, pranayama, meditation and chanting in therapeutic intervention</li> <li>• CO5 – Study the application of therapeutic yogic modules for disorders of the major systems of the body</li> </ul>
<b>PYT18DE008</b>	<b>STATISTICS IN YOGA THERAPY</b>
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Learn about the types of data and the measures of central tendency and variability</li> <li>• CO2 - Understand normal distribution and testing of hypothesis through T test, ANOVA, correlation, and non-parametric tests</li> <li>• CO3 - Gain ability to present data through graphical representations</li> </ul>

	<b>ENVIRONMENTAL STUDIES</b>
<b>PYT18SE401</b>	
	<b>COURSE OUTCOMES:</b> <ul style="list-style-type: none"> <li>• CO1 - Raises awareness about the environment, natural resources and social issues that affect environment</li> <li>• CO2 - Learn about the causes and effects of environmental pollution and means to control it</li> <li>• CO3 - Understand the impact of various social issues and population growth on the environment</li> </ul>

**TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY,  
MELAKKOTTAIYUR POST CHENNAI - 600 127.**

**DEPT. OF EXERCISE PHYSIOLOGY AND BIOMECHANICS**

**M.Sc., SPORTS BIOMECHANICS AND KINESIOLOGY  
(Three years Regular Programme)**

**CHOICE BASED CREDIT SYSTEM(CBCS)**

**B.SC. EXERCISE PHYSIOLOGY AND NUTRITION**

### **Programme Educational Objectives (PEOs)**

1. To teach the total fitness that integrates medical fitness, Nutritional Fitness, Physical, Mental and Social Fitness.
2. The effect of Exercise on various system are given due coverage.
3. 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.

### **Programme Outcomes (Po's)**

**PO-1)** To gain knowledge on Basic anatomy and Physiology, Fundamental in Food Science, Health Education, Clinical Exercise Testing, Introduction to Human Nutrition Kinanthropometry, Sports Nutrition, Clinical Dietetics, Exercise for special population, Clinical Dietetics, Effect of exercise on various system, Kinesiology, Strength Training and conditioning, Nutritional Ergogenic Aids and exercise performance, Weight Management , Geriatric Sports and Nutrition , Floor and Step Aerobics, Elementary Statistics, First Aid and Sports Injury and Physiotherapy, Occupational and Functional Assessment, Sports Biomechanics, Nutrition and Immune function in Athletics, Fitness and Wellness, Stability and Core Training.

**PO-2)** To gain knowledge in fitness and nutrition.

**PO-3)** To gain practical knowledge in Floor and Step Aerobics , stability and core training, Kinanthropometry, Clinical Exercise Testing, Training and performance, Strength Training and Conditioning, WEIGHT MANAGEMENT.

**SEMESTER- I- PAPER CODE – U**

**EN18CT101 BASIC ANATOMY & PHYSIOLOGY – I**

### **COURSE OUTCOMES:**

CO- 1. By learning the subject the students will be aware of the various anatomical structures present in Human body.

CO -2. The students after learning will gain knowledge about the normal functioning of various

organs in Human body.

CO –3. Only after knowing about normal functioning of the human body the students will the students will be knowing about effect of exercise on various system.

**SEMESTER- I- PAPER CODE - UEN18CT102  
FUNDAMENTALS IN FOOD SCIENCE**

**COURSE OUTCOMES:**

After studying this paper, the student should be able to:

Nutrients and their primary functions

Recognize common characteristics of well-nourished people

Recognize symptoms of malnutrition and nutrition assessment

Understand the scientific principles underlying food preparation.

**SEMESTER I- PAPER CODE -UEN18DE103 HEALTH EDUCATION  
COURSE OUTCOMES:**

By the end of this course, you will be able to describe and/or demonstrate:

The various published definitions of “health.”

The concept of optimal health in developing a personal view of health.

The history of national disease prevention and health promotion activities.

Key risk factors affecting health promotion and longevity.

The core foundation areas underlying health education as an applied discipline.

Trends potentially affecting health education in the future

**SEMESTER II- PAPER CODE - UEN18CT2  
INTRODUCTION TO HUMAN NUTRITION  
COURSE OUTCOMES:**

After studying this paper, the student should be able to:

1. Macronutrients and their primary functions

2. Gain basic knowledge of the different nutrients and their role in maintaining health of the community

3. Micronutrients and their primary functions.

**SEMESTER- II- PAPER CODE - UEN18CT203 CLINICAL EXERCISE TESTING**

**PROCEDURES**

**COURSE OUTCOME:**

On completion of this instruction

1. Students will be able to accurately screen, assess.
2. Students should be able to utilize laboratory testing that measures heart rate, blood irredeemable uptake, body co position and flexibility.

**SEMESTER III- PAPER CODE -UEN18CT301 KINANTHROPOMETRY**

**COURSE OUTCOME**

After studying this paper, the student should be able to:

Accurately use anatomical and physiological terminology.

Competently use and understand the principles pretentiousness procedures for assessing human body composition.

**SEMESTER III- PAPER CODE -UEN18CT302 FUNDAMENTALS OF SPORTS**

**NUTRITION**

**COURSE OUTCOMES:**

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

Design and run a group consultation for athletes about sports nutrition.

Develop knowledge on sports nutrition.

**SEMESTER III - PAPER CODE -UEN18CT303 TRAINING & PERFORMANCE**

**COURSE OUTCOMES:**

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

To constructively apply the acquired scientific findings and methodological repertoire in practical training under various conditions.

To recognize the tendencies of development in their sport and consider them in their training process.

**SEMESTER IV- PAPER CODE -UEN18CT401 EXERCISE FOR SPECIAL**

**POPULATION**

**COURSE OUTCOMES:**

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

Will be able to explain general principles of exercise prescription for special populations.

Able to identify the important differences between children and adult.

**SEMESTER IV- PAPER CODE -UEN18CT303 CLINICAL DIETETICS**

**COURSE OUTCOMES:**

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

Prepare Graduates to collaborate with other members of the health care team, industry and academia as the nutrition experts.

**SEMESTER IV- PAPER CODE -UEN18CT403 EFFECT OF EXERCISE ON VARIOUS**

**SYSTEMS**

**COURSE OUTCOMES:**

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

**SEMESTER- I- PAPER CODE -UEN18DE501 KINESIOLOGY**

**COURSE OUTCOMES:**

After completing the Kinesiology major a student will be able to:

List and describe five career options available in the field of kinesiology.

Describe and critically analyze the role of physical activity and its impact on health, society and quality of life.

Identify critical elements of motor skill performance, combine motor skills into appropriate sequences for the purpose of improving skill learning, and demonstrate competent motor skill performance in a variety of physical activities.

Utilize measurement concepts (qualitative and quantitative) to assess student/client performance and program effectiveness

Describe and demonstrate effective verbal and nonverbal communication skill

### **SEMESTER V- PAPER CODE -UEN18DE502 STRENGTH TRAINING AND CONDITIONING**

#### **COURSE OUTCOMES:**

To Interpret and apply scientific knowledge and literature relating to strength training.

Understand the importance of organizations administration and leadership and their importance in the development of safe and effective training programs.

### **SEMESTER V- PAPER CODE -UEN18DE503 NUTRITIONAL ERGOGENIC AIDS AND EXERCISE PERFORMANCE**

#### **COURSE OUTCOMES:**

1. Gain in depth knowledge on one nutritional ergogenic aids.
2. To evaluate an athlete's diet and make valuable nutritional recommendations that will impact his/ her sports performance.

### **SEMESTER V- PAPER CODE -UEN18DE504 WEIGHT MANAGEMENT**

#### **COURSE OUTCOME:**

1. 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
2. Develop the confidence to be able to make informed choices from a wide span of weight loss options and avoid the use of rigidly fixed methods, thereby delivering programmes best suited to individual needs
3. Learn the skills to be able to counsel on a one-to-one basis. We believe that this favours the resolution of individual circumstances and problems. Receive the training to see your clients through every stage of the process, thereby maximizing their chances of success.

**SEMESTER V- PAPER CODE -UEN18DE505 FITNESS AND NUTRITIONFOR  
GERIATRIC**

**COURSE OUTCOMES:**

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

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

Design and run a group consultation for Master athletes about geriatric sports and nutrition.

**V SEMESTER - PAPER CODE**

**UEN18DE506 FLOOR AND STEP AEROBICS**

**COURSE OUTCOME:**

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

Understand and apply the knowledge of basic choreography, music selection and effective group management.

Identify the major muscle groups and their application to aerobics.

**SKILL ENHANCEMENT COURSE (SEC) SEMESTER V- PAPER CODE -  
UEN18SE501**

**ELEMENTARY STATISTICS IN EXERCISE PHYSIOLOGY & NUTRITION  
COURSE OBJECTIVES**

After completing this subject we will be able to understand about

1. the basic concepts of Statistics
2. need of Statistics
3. how to analysis the problem using statistics tools

**SEMESTER VI- PAPER CODE -UEN18DE601 FIRST AID AND SPORTS  
INJURY & PHYSIOTHERAPY**

**COURSE OUTCOMES:**

1. To know and understand the science, methods, techniques and instruments on which physiotherapy is based.
2. To know and understand the methods, procedures and actions expected in clinical contexts, as well as to employ physiotherapy as an educational tool for

promoting and maintaining health.

3. To participate in the areas of the promotion, prevention, protection and recovery of health.

4. To learn in the development of physiotherapy protocols based on scientific evidence that promote research in physiotherapy.

5. To understand the importance of upgrading knowledge, skills and attitudes  
Familiarise themselves with First Aid regulations of 2002

6. Be aware of the duties of the students as to First Aid

7. Manage an unresponsive casualty who is breathing normally

8. Manage and unresponsive casualty who is not breathing normally

9. Understand how to manage a variety of conditions.

**SEMESTER VI- PAPER CODE -UEN18DE602 OCCUPATIONAL AND FUNCTIONAL ASSESSMENT**

**SEMESTER VI- PAPER CODE -UEN18DE602 OCCUPATIONAL AND FUNCTIONAL ASSESSMENTCOURSE 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.

**SEMESTER VI- PAPER CODE -UEN18DE603 SPORTS BIOMECHANICS**

**SEMESTER VI- PAPER CODE -UEN18DE604 NUTRITION AND IMMUNE FUNCTION IN ATHLETES**

**SEMESTER VI- PAPER CODE -UEN18DE605 FITNESS AND WELLNE**

**COURSE OUTCOMES:**

1. Students will be able to explain the process to become physically fit. They will also understand how food affects your personal well- being and learn how to make smart choices. They will demonstrate this through personal journal keeping, class assignments, group projects,

physical activities, quizzes and physical tests.

- 2 To define how becoming fit and leading a healthy lifestyle will improve the quality of life both mentally and physically.
- 3 Students will be able to explain how the way they live their life will affect the quality of life they lead.
- 4 They will demonstrate this through personal journal keeping, class assignments, group projects, physical activities, quizzes and physical tests.
- 5 Develop a personal fitness routine.

#### **SEMESTER VI- PAPER CODE -UEN18DE606**

#### **STABILITY AND CORE TRAINING**

#### **COURSE OUTCOMES:**

Apply the core principles to exercise on a large stability cushion

Understand how the unstable nature of the cushion challenges stability.

Discover how to include proprioceptive challenge into any workout.

**TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY,  
MELAKKOTTAIYUR POST CHENNAI - 600 127.**

**DEPT. OF EXERCISE PHYSIOLOGY AND BIOMECHANICS  
M.Sc., SPORTS BIOMECHANICS AND KINESIOLOGY  
(Three years Regular Programme)**

**CHOICE BASED CREDIT SYSTEM (CBCS)**

**B.SC. EXERCISE PHYSIOLOGY AND NUTRITION**

**Programme Educational Objectives (PEOs)**

1. To teach the total fitness that integrates medical fitness, Nutritional Fitness, Physical, Mental and Social Fitness.
2. The effect of Exercise on various system are given due coverage.
3. 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.

**Programme Outcomes (Po's)**

**PO-1)** To gain knowledge on Basic anatomy and Physiology, Fundamental in Food Science, Health Education, Clinical Exercise Testing, Introduction to Human Nutrition Kinanthropometry, Sports Nutrition, Clinical Dietetics, Exercise for special population, Clinical Dietetics, Effect of exercise on various system, Kinesiology, Strength Training and conditioning, Nutritional Ergogenic Aids and exercise performance, Weight Management , Geriatric Sports and Nutrition , Floor and Step Aerobics, Elementary Statistics, First Aid and Sports Injury and Physiotherapy, Occupational and Functional Assessment, Sports Biomechanics, Nutrition and Immune function in Athletics, Fitness and Wellness, Stability and Core Training.

**PO-2)** To gain knowledge in fitness and nutrition.

**PO-3)** To gain practical knowledge in Floor and Step Aerobics , stability and core training, Kinanthropometry, Clinical Exercise Testing, Training and performance, Strength Training and Conditioning, WEIGHT MANAGEMENT.

**SEMESTER- I- PAPER CODE – U**

**EN18CT101 BASIC ANATOMY & PHYSIOLOGY – I**

**COURSE OUTCOMES:**

CO- 1. By learning the subject the students will be aware of the various anatomical structures present in Human body.

CO -2. The students after learning will gain knowledge about the normal functioning of various organs in Human body.

CO –3.Only after knowing about normal functioning of the human body the students will the

students will be knowing about effect of exercise on various system.

**SEMESTER- I- PAPER CODE - UEN18CT102**

**FUNDAMENTALS IN FOOD SCIENCE**

**COURSE OUTCOMES:**

After studying this paper, the student should be able to:

Nutrients and their primary functions

Recognize common characteristics of well-nourished people

Recognize symptoms of malnutrition and nutrition assessment

Understand the scientific principles underlying food preparation.

**SEMESTER I- PAPER CODE -UEN18DE103 HEALTH EDUCATION**

**COURSE OUTCOMES:**

By the end of this course, you will be able to describe and/or demonstrate:

The various published definitions of "health."

The concept of optimal health in developing a personal view of health.

The history of national disease prevention and health promotion activities.

Key risk factors affecting health promotion and longevity.

The core foundation areas underlying health education as an applied discipline.

Trends potentially affecting health education in the future

**SEMESTER II- PAPER CODE - UEN18CT2**

**INTRODUCTION TO HUMAN NUTRITION**

**COURSE OUTCOMES:**

After studying this paper, the student should be able to:

1. Macronutrients and their primary functions

2. Gain basic knowledge of the different nutrients and their role in maintaining health of the community

3. Micronutrients and their primary functions.

**SEMESTER- II- PAPER CODE - UEN18CT203 CLINICAL EXERCISE TESTING**

**PROCEDURES**

**COURSE OUTCOME:**

On completion of this instruction

1. Students will be able to accurately screen, assess.

2. Students should be able to utilize laboratory testing that measures heart rate, blood irredeemable uptake, body co position and flexibility.

**SEMESTER III- PAPER CODE -UEN18CT301 KINANTHROPOMETRY**

**COURSE OUTCOME**

After studying this paper, the student should be able to:

Accurately use anatomical and physiological terminology.

Competently use and understand the principles pretentiousness procedures for assessing human body composition.

**SEMESTER III- PAPER CODE -UEN18CT302 FUNDAMENTALS OF SPORTS**

**NUTRITION**

**COURSE OUTCOMES:**

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

Design and run a group consultation for athletes about sports nutrition.

Develop knowledge on sports nutrition.

**SEMESTER III - PAPER CODE -UEN18CT303 TRAINING & PERFORMANCE**

**COURSE OUTCOMES:**

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

To constructively apply the acquired scientific findings and methodological repertoire in practical training under various conditions.

To recognize the tendencies of development in their sport and consider them in their training process.

**SEMESTER IV- PAPER CODE -UEN18CT401 EXERCISE FOR SPECIAL**

**POPULATION**

**COURSE OUTCOMES:**

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

Will be able to explain general principles of exercise prescription for special populations.

Able to identify the important differences between children and adult.

**SEMESTER IV- PAPER CODE -UEN18CT303 CLINICAL DIETETICS**

**COURSE OUTCOMES:**

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

Prepare Graduates to collaborate with other members of the health care team, industry and academia as the nutrition experts.

**SEMESTER IV- PAPER CODE -UEN18CT403 EFFECT OF EXERCISE ON VARIOUS SYSTEMS**

**COURSE OUTCOMES:**

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

**SEMESTER- I- PAPER CODE -UEN18DE501 KINESIOLOGY**

**COURSE OUTCOMES:**

After completing the Kinesiology major a student will be able to:

List and describe five career options available in the field of kinesiology.

Describe and critically analyze the role of physical activity and its impact on health, society and quality of life.

Identify critical elements of motor skill performance, combine motor skills into appropriate sequences for the purpose of improving skill learning, and demonstrate competent motor skill performance in a variety of physical activities.

Utilize measurement concepts (qualitative and quantitative) to assess student/client performance and program effectiveness

Describe and demonstrate effective verbal and nonverbal communication skill

**SEMESTER V- PAPER CODE -UEN18DE502 STRENGTH TRAINING AND CONDITIONING**

**COURSE OUTCOMES:**

To Interpret and apply scientific knowledge and literature relating to strength training.

Understand the importance of organizations administration and leadership and their importance in the development of safe and effective training programs.

**SEMESTER V- PAPER CODE -UEN18DE503 NUTRITIONAL ERGOGENIC AIDS AND EXERCISE PERFORMANCE**

**COURSE OUTCOMES:**

1. Gain in depth knowledge on one nutritional ergogenic aids.
2. To evaluate an athlete's diet and make valuable nutritional

recommendations that will impact his/ her sports performance.

#### **SEMESTER V- PAPER CODE -UEN18DE504 WEIGHT MANAGEMENT**

##### **COURSE OUTCOME:**

1. 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
2. Develop the confidence to be able to make informed choices from a wide span of weight loss options and avoid the use of rigidly fixed methods, thereby delivering programmes best suited to individual needs
3. Learn the skills to be able to counsel on a one-to-one basis. We believe that this favours the resolution of individual circumstances and problems. Receive the training to see your clients through every stage of the process, thereby maximizing their chances of success.

#### **SEMESTER V- PAPER CODE -UEN18DE505 FITNESS AND NUTRITIONFOR GERIATRIC**

##### **COURSE OUTCOMES:**

- Provide individual advice and guidance in the area of Geriatric sports.
- Provide individual advice and guidance in the area of Geriatric nutrition.
- Design and run a group consultation for Master athletes about geriatric sports and nutrition.

#### **V SEMESTER - PAPER CODE**

#### **UEN18DE506 FLOOR AND STEP AEROBICS**

##### **COURSE OUTCOME:**

- Demonstrate the ability to perform aerobic movements in various combination and forms.
- Understand and apply the knowledge of basic choreography, music selection and effective group management.
- Identify the major muscle groups and their application to aerobics.

#### **SKILL ENHANCEMENT COURSE (SEC) SEMESTER V- PAPER CODE - UEN18SE501**

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

##### **COURSE OBJECTIVES**

After completing this subject we will be able to understand about

1. the basic concepts of Statistics
2. need of Statistics
3. how to analysis the problem using statistics tools

**SEMESTER VI- PAPER CODE -UEN18DE601 FIRST AID AND SPORTS**

**INJURY & PHYSIOTHERAPY**

**COURSE OUTCOMES:**

1. To know and understand the science, methods, techniques and instruments on which physiotherapy is based.
2. To know and understand the methods, procedures and actions expected in clinical contexts, as well as to employ physiotherapy as an educational tool for promoting and maintaining health.
3. To participate in the areas of the promotion, prevention, protection and recovery of health.
4. To learn in the development of physiotherapy protocols based on scientific evidence that promote research in physiotherapy.
5. To understand the importance of upgrading knowledge, skills and attitudes Familiarise themselves with First Aid regulations of 2002
6. Be aware of the duties of the students as to First Aid
7. Manage an unresponsive casualty who is breathing normally
8. Manage and unresponsive casualty who is not breathing normally
9. Understand how to manage a variety of conditions.

**SEMESTER VI- PAPER CODE -UEN18DE602 OCCUPATIONAL AND FUNCTIONAL ASSESSMENT**

**SEMESTER VI- PAPER CODE -UEN18DE602 OCCUPATIONAL AND FUNCTIONAL ASSESSMENTCOURSE 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.

**SEMESTER VI- PAPER CODE -UEN18DE603 SPORTS**

**BIOMECHANICS**

**SEMESTER VI- PAPER CODE -UEN18DE604 NUTRITION AND IMMUNE FUNCTION IN ATHLETES**

**SEMESTER VI- PAPER CODE -UEN18DE605 FITNESS AND WELLNE**

**COURSE OUTCOMES:**

1. Students will be able to explain the process to become physically fit.

They will also understand how food affects your personal well-being and learn how to make smart choices. They will demonstrate this through personal journal keeping, class assignments, group projects, physical activities, quizzes and physical tests.

- 2 To define how becoming fit and leading a healthy lifestyle will improve the quality of life both mentally and physically.
- 3 Students will be able to explain how the way they live their life will affect the quality of life they lead.
- 4 They will demonstrate this through personal journal keeping, class assignments, group projects, physical activities, quizzes and physical tests.
- 5 Develop a personal fitness routine.

#### **SEMESTER VI- PAPER CODE -UEN18DE606**

#### **STABILITY AND CORE TRAINING**

#### **COURSE OUTCOMES:**

Apply the core principles to exercise on a large stability cushion

Understand how the unstable nature of the cushion challenges stability.

Discover how to include proprioceptive challenge into any workout.

**TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY**  
**MELAKKOTTAIYUR POST CHENNAI - 600 127**  
**DEPT. OF EXERCISE PHYSIOLOGY AND BIOMECHANICS M**  
**(Two years Regular Programme)**  
**CHOICE BASED CREDIT SYSTEM (CBCS)**

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

**PROGRAM EDUCATIONAL OBJECTIVES (PEOS)**

PEO-1: 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 Special Nutrition, dietetics, sports, research, and service.

PEO-2: To conduct advanced research in areas related to nutrition and exercise physiology and mentor junior researchers who will become future thought leaders in the fields.

PEO-3: To prepare students for professional credentialing in healthcare vocational with emphasis in exercise physiology, nutrition and dietetics, fitness health promotion, disease prevention and related specialties.

**PROGRAMME OUTCOMES (PO'S)**

The post graduates are able to

**PO-1)** To gain knowledge on Cardio respiratory physiology, muscular physiology, Environmental Physiology, advanced human nutrition, Research and statistics, Neuro physiology, Renal physiology, Health and fitness, Ergogenic aids and supplements, Exercise and sports for women, Training and performance

**PO-2)** To gain knowledge in fitness and nutrition

**PO-3)** To analyse the body composition and to assess the anthropometric measurements

**PO-4)** To create a platform to students to engage in exercise Physiology and Nutrition, Research and pursue higher education

**PO-5)** To produce an efficient Exercise Physiologist in Research laboratories, fitness centre, National teams and faculty in Academic institutions.

**PO-6)** To produce Sports Nutritionist to work with Sports Teams/ Sports Clubs/ Research Labs as Sports Nutritionist.

<b>PEN18CT101</b>	<b>BIOENERGETICS AND MUSCULAR PHYSIOLOGY</b>
	<p><b>COURSE OUTCOME:</b></p> <p>CO1 - Understanding of metabolic influences in glucose fatty acid cycle</p> <ul style="list-style-type: none"> <li>• CO2 - Distinction between fast and slow components of recovery oxygen</li> <li>• CO3 - Pathways for recovery of energy stores -</li> <li>• CO4- Training impacts on fuel use and recovery</li> <li>• CO5- Influences on lactate inflection point</li> </ul>
<b>PEN18CT102</b>	<b>CARDIOVASCULAR AND RESPIRATORY PHYSIOLOGY</b>
	<p><b>COURSE OUTCOMES:</b></p> <p>. Critically evaluate the central and peripheral mechanisms that regulate the cardiovascular and respiratory systems in exercise and their interactions.</p> <p>. To use the Exercise programmes to enhance cardiovascular and respiratory function in health, sports and disease.</p>
<b>PEN18CT103</b>	<b>ADVANCED HUMAN NUTRITION</b>
	<p><b>COURSE OUTCOMES:</b></p> <p>1. It will be the physical and biological science foundation of the dietetics profession.</p>
<b>PEN18CT201</b>	<b>NEURO PHYSIOLOGY</b>
	<p><b>COURSE OUTCOMES:</b></p> <p>1. To interpret the knowledge of Neurophysiology in athletes and in special population.</p>
<b>PEN18CT202</b>	<b>TRAINING AND COMPETITION NUTRITION</b>
	<p><b>COURSE OUTCOMES:</b></p> <p>1. To impart knowledge on sports specific nutrition and hydration guidelines- in strength, weight class-combat and racket sport athletes.</p> <p>2. To help students understand the role or ergogenic aids- their dose, safety and efficacy to enhance sports performance</p>

PEN18CT203	<b>STATISTICS IN EXERCISE PHYSIOLOGY AND NUTRITION</b>
	<p><b>COURSE OUTCOMES:</b></p> <p>After completing this subject we will be able to understand about</p> <ol style="list-style-type: none"> <li>1. the basic concepts of Statistics</li> <li>2. need of Statistics</li> <li>3. how to analysis the problem using statisticstools</li> </ol>
PEN18CT301	<b>ENVIRONMENTAL PHYSIOLOGY</b>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. Students who successfully complete the paper will develop an understanding of the physiological adaptations that have evolved them to survive, adapt, participate and to train in various sports activities.</li> </ol>
PEN18CT302	<b>RESEARCH METHODOLOGY IN EXERCISE PHYSIOLOGY AND NUTRITION</b>
	<p><b>COURSE OUTCOMES:</b></p> <p>after completing this subject we will be able to understand about</p> <ol style="list-style-type: none"> <li>1. the basic concepts in research</li> <li>2. need and scope of research</li> <li>3. types of research in recent trends</li> <li>4. how to analysis the problem using statistics techniques</li> </ol>
PEN18CT301	<b>EXERCISE AND DIET PRESCRIPTION FOR SPECIAL POPULATION</b>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. To develop the Students will become expertise in exercise testing and prescription in Special populations.</li> <li>2. The risks of exercise, pre-participation screening procedures and guidelines for exercise prescription are discussed.</li> <li>3. The focus will be on Diet and aerobic/cardiovascular assessment and conditioning.</li> <li>4. Students will become knowledgeable about laboratory and field testing techniques including the estimation of aerobic capacity, Strength and Flexibility and prescription of exercise through theoretical and laboratory learning.</li> <li>5. Based on the disease specific mechanisms, evidence-based options for exercise interventions will be presented.</li> </ol>

<b>DSE</b>	<b>HEALTH, FITNESS AND PERFORMANCE ASSESSMENT</b>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. Describe and discuss the relationship between physical activity and health across the lifespan.</li> <li>2. Conduct health related fitness assessment for the cardio respiratory endurance, muscular strength, endurance, flexibility and body composition</li> </ol>
DSC	<b>MUSCLE AND EXERCISE METABOLISM</b>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. Students will be able to know the importance of muscle glycogen and blood glucose for increased ATP production within contracting skeletal muscle during Exercise.</li> </ol>
DSC	<b>EXERCISE BIO-CHEMISTRY</b>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. To demonstrate technical meaning of fundamental Laboratory Skill, use proper laboratory safely in practices and demonstrate proficiency in using computers to solve chemical problems</li> <li>2. To demonstrate effective scientific communication skill – both written and oral, students will be able to write report and present the result of their own scientific works or the other work.</li> </ol>
DSC	<b>RENAL PHYSIOLOGY</b>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. Students will be able to present individual research papers.</li> <li>2. Students will be able to develop and in depth understanding if the kidney physiology.</li> </ol>
DSC	<b>SUPPLEMENTS AND ERGOGENIC AIDS FOR PERFORMANCE ENHANCEMENT</b>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. To apply the knowledge and to describe the ill effects of ergogenic aids to athletics</li> <li>2. To educate the athletics about the use of doping substances will harm the important system and further will decline the performance.</li> </ol>

<b>DSC</b>	<b>NUTRITIONAL PLANNING FOR SPORTS AND EXERCISE</b>
	<p><b>COURSE OUTCOMES:</b></p> <p>The students will be proficient in planning menus with macro and micronutrients for various sports.</p>
<b>DSC</b>	<b>EXERCISE ASSESSEMENT IN SPECIAL POPULATION</b>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. Became a specialized personal trainer for special population such as pregnant women, children and the elderly.</li> <li>2. Analyze and interpret data from an exercisetest.</li> </ol>
	<b>EXERCISE AND SPORTS FOR WOMEN</b>
	<p><b>COURSE OUTCOMES:</b></p> <p>1. The ESS for women student is knowledgeable in the sub-disciplines of sports science and be able to adopt an interdisciplinary approach to problem-solve practical situations related to exercise and sports for women. Through the study of the subject, he/she develops the analytical skills to observe, analyse and evaluate practical performance for improvement.</p>
<b>GE</b>	<b>EXERCISE PHYSIOLOGY</b>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. Demonstrate the sound fundamental knowledge and understanding of the principles of Exercise physiology as they relate to responses and adaptations to physical activity and exercise.</li> <li>2. Plan, administer, and evaluate wellness and fitness programs and exercise physiology tracks based in sport, clinical, industrial and corporate environment.</li> <li>3. Demonstrate requisite skills and abilities for meaningful employment in Exercise Physiology related areas or pursue higher studies in the area of Exercise Physiology.</li> </ol>
<b>GE</b>	<b>SPORTS NUTRITION</b>

	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. Provide individual advice and guidance in the area of sports nutrition.</li> <li>2. Design and run a group consultation for athletes about sports nutrition.</li> <li>3. Develop knowledge on sports nutrition.</li> </ol>
	<p><b>EXERCISE SCIENCE AND FUNCTIONAL ASSESSMENT</b></p>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. To consider scope of practice when selecting fitness assessments and interpreting data from assessments.</li> <li>2. To appreciate the historical development of modern fitness assessments, especially with regard to trends and technology.</li> </ol>
	<ol style="list-style-type: none"> <li>3. To appreciate the value of the methods section of a scientific publication.</li> <li>4. To appreciate how and why fitness assessments are used in various settings: fitness industry, sports, clinical, and even basic sciences.</li> </ol>
<b>GE</b>	<b>FLOOR AND STEP AEROBICS</b>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. Demonstrate the ability to perform aerobic movements in various combination and forms.</li> <li>2. Understand and apply the knowledge of basic choreography, music selection and effective group management.</li> <li>3. Identify the major muscle groups and their application to aerobics.</li> </ol>
<b>GE</b>	<b>STABILITY AND CORE TRAINING</b>

	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. Apply the core principles to exercise on a large stability cushion</li> <li>2. Understand how the unstable nature of the cushion challenges stability.</li> <li>3. Discover how to include proprioceptive challenge into any workout.</li> </ol>
GE	<b>TRAINING AND PERFORMANCE</b>
	<p><b>COURSE OUTCOMES:</b></p> <ol style="list-style-type: none"> <li>1. To work with higher efficiency as Exercise Physiologist or Exercise Trainers.</li> <li>2. To constructively apply the acquired scientific findings and methodological repertoire in practical training under various conditions.</li> <li>3. To recognize the tendencies of development in their sport and consider them in their training process.</li> </ol>

**TAMIL NADU PHYSICAL EDUCATION AND SPORTS  
UNIVERSITY  
CHENNAI – 600 127**



**APPROVED SYLLABUS FOR  
MASTER OF BUSINESS ADMINISTRATION (SPORTS  
MANAGEMENT)**

**UNDER CHOICE BASED CREDIT SYSTEM (CBCS)  
2018-2019 ONWARDS**

**DEPARTMENT OF SPORTS MANAGEMENT AND  
SPORTS PSYCHOLOGY & SOCIOLOGY**

## EDUCATIONAL OBJECTIVES (PEOs)

PEO-1) Graduate will have successful academic and research career.

PEO-2) Graduates will have employment in public and private sectors and resolve economic, social and environmental issues.

## PROGRAMME OUTCOMES (POs)

### The post graduates are able to

PO -1: Explore current trends and key concepts in sport management.

PO – 2: Understand the dynamics of Sports Industry at the national and International Level.

PO -3: Develop analytical and decision-making skills.

PO -4: Inculcate essential business and marketing skills blended with specialized knowledge in sports management.

PO -5: Identify and evaluate recent changes in sport participation and policies and their implications on sports development.

PO -6: Inculcate the knowledge on sports governance for effectively managing sport organizations

PO -7: Demonstrate mastery on Analytics (Quantitative Aspects)

PO – 8: Develop peer group Learning and Working in groups

PO – 9: Use Application of Technology tools in business

PO –10: Demonstrate ethical, Social and Environmental Responsibilities in Business Environment

## PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO -1: Graduates will be able to apply managerial skills for effective governance of sports

PSO -2: Graduates will be able to understand and analyze the sports environment and take better decisions to cope with external challenges

## PSM18C T101 PRINCIPLES OF MANAGEMENT

COURSE OUTCOMES	
CO-1	Gain the knowledge on <ul style="list-style-type: none"><li>• Functions of Management</li><li>• Management by Objectives</li></ul>

CO-2	Understand different ways of communication and barriers to communication
CO-3	Acquiring knowledge on different types of Leadership and Training

**PSM18CT 102 ORGANIZATIONAL BEHAVIOUR**

<b>COURSE OUTCOMES</b>	
CO-1	Understand the scope and functions of Organizational Behavior
CO-2	Identify the difference between Leader and a Manager
CO-3	Understand the significance of Motivation

**PSM18C T103 BUSINESS LAWS**

<b>COURSE OUTCOMES</b>	
CO-1	Understand the significance of legal aspects in Business
CO-2	Identify the essential elements of Business Contract
CO-3	Examine the Rights and Duties of Business Partner.

**PSM18 CT104 MANAGEMENT ECONOMICS**

<b>Course Outcomes</b>	
CO-1	Identify the Importance of Managerial Economics
CO-2	Take effective Decision on Pricing Policy
CO-3	Analyze the Break Even Point to decide on Quantum of Production

**PSM18C T105 MANAGEMENT ACCOUNTING**

<b>COURSE OUTCOMES</b>	
CO-1	Understand the Basic Concepts in Accountancy

CO-2	Prepare and Analyze Financial Statements
CO-3	Offer Concrete Suggestions for Financial Planning and Budgeting

**PSM18 CT106 QUANTITATIVE METHOD IN BUSINESS**

<b>COURSE OUTCOMES(COS)</b>	
CO-1	Acquire in–depth knowledge on Probability Distribution
CO-2	Identify the significance of Mathematics in Business
CO-3	Understand the Basics concepts in Statistics

**PSM18 CT107 OPERATIONS MANAGEMENT**

<b>COURSE OUTCOMES</b>	
CO-1	Gain knowledge on functions of Production and Operations
CO-2	Classify the different Production Systems
CO-3	Develop the steps in Process Planning

**PSM18 CT108 MARKETING MANAGEMENT**

<b>COURSE OUTCOMES(COS)</b>	
CO-1	Understand the Fundamentals of Marketing
CO-2	Identify the different Marketing Environments
CO-3	Examine the Buyer Behaviour for effective Marketing

**PSM18 CT109 FINANCIAL MANAGEMENT**

<b>COURSE OUTCOMES</b>	
CO-1	Formulate the Objectives and role of Financial Management
CO-2	Identify the different Sources of Finance

	CO-3	Gain the knowledge on different Theories on Dividend
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**PSM18 CT110 HUMAN RESOURCE MANAGEMENT**

	<b>COURSE OUTCOMES</b>	
	CO-1	Examine the Scope of Human Resource Management
	CO-2	Identify the Functions and Role of Human Resource Manager
	CO-3	Develop the need for Training and Development

**PSM18 CT111 OPERATIONS RESEARCH**

	<b>COURSE OUTCOMES</b>	
	CO-1	Understand the concept of Optimization Techniques
	CO-2	Make effective Decision through resource management techniques
	CO-3	Acquire Knowledge on Network Construction for Project Management

**PSM18 CT112 MANAGEMENT INFORMATIONS SYSTEMS**

	<b>COURSE OUTCOMES (COS)</b>	
	CO-1	Examine the Business Application of Information System
	CO-2	Analyze the different approaches to Information System
	CO-3	Acquire in–depth knowledge on Enterprise Resource Planning

**PSM18 CT113 TOTAL QUALITY MANAGEMENT**

	<b>COURSE OUTCOMES(COS)</b>	
	CO-1	Understand the significance of Total Quality Management
	CO-2	Formulate the new Strategies for Quality Planning
	CO-3	Develop the Bench Marking using Quality Tools

**PSM18 CT114 STRATEGIC MANAGEMENT**

	<b>COURSE OUTCOMES(COs)</b>	
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CO-1	Gain knowledge on different Business Environment
CO-2	Make SWOT Analysis for the given Business Condition
CO-3	Identify the Economic Indicators in Human Resource Management

### **PSM18C T115 RESEARCH METHODS IN BUSINESS**

<b>COURSE OUTCOMES(COs)</b>	
CO-1	Understand the Significance of Research
CO-2	Formulate and Identify the Research Problem
CO-3	Apply the knowledge of Statistics in Business Research

### **PSM18 AE101 BUSINESS COMMUNICATION**

<b>COURSE OUTCOMES (COs)</b>	
CO-1	Probe the need and Importance of Business Communication
CO-2	Identify the Barriers in Communication
CO-3	Communicate effectively and Develop Good Business Communication Skills

### **PSM18 AE301 PROFESSIONAL ETHICS**

<b>COURSE OUTCOMES (COs)</b>	
CO-1	Understand the nature of Business Ethics
CO-2	Analyze the role Ethics in Sports
CO-3	Resolve the Sports Conflicts through Ethical principles

### **PSM18 SE201 E - COMMERCE**

<b>COURSE OUTCOMES (COs)</b>	
CO-1	Understand the Fundamentals of E-Commerce

CO-2	Identify the major Issues related to Online Marketing
CO-3	Examine the different Business Models available for E-Commerce

**PSM18 DE101 SPORTS ORGANIZATION AND ADMINISTRATION**

<b>COURSE OUTCOMES</b>	
CO-1	Examine the Social Context of Sports
CO-2	Understand the significance of Technology in Sports
CO-3	Measure the Performance of Olympic Sports Organizations

**PSM18D E102 SPORTS MANAGEMENT – PRINCIPLES AND PRACTICES**

<b>COURSE OUTCOMES</b>	
CO-1	Manage the Sports Environment through Sports Research
CO-2	Possess an Idea on Sports Budgeting
CO-3	Assess the Challenges in Sports Management

**PSM18 DE103 SPORTS MARKETING**

<b>COURSE OUTCOMES</b>	
CO-1	Identify the Uniqueness of Sports
CO-2	Understand the Behaviour of Sports Consumers
CO-3	Bring out the effective Strategies for Sports Marketing

**PSM18 DE104 SPORTS FACILITY MANAGEMENT**

<b>Course Outcomes</b>	
CO-1	Know about the different types of Sports Facilities
CO-2	Acquire in–depth knowledge on Sports Facility Planning

CO-3	Identify the Key factors required for a good Sports Infrastructure
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**PSM18D E105 SPORTS PSYCHOLOGY AND SOCIOLOGY**

<b>COURSE OUTCOMES(COS)</b>	
CO-1	Bring out the Need and Importance of Psychology in Sports
CO-2	Understand the significance of Motivation in Sports
CO-3	Analyze the Role of Women in Sports

**PSM18 DE106 SPORTS TOURISM**

<b>COURSE OUTCOMES</b>	
CO-1	Acquire Knowledge on Sports Tourism
CO-2	Identify the Economic Value of Sports Tourism
CO-3	Derive the Future Prospects of Sports Tourism

**PSM18 DE107 ADVERTISING IN SPORTS**

<b>COURSE OUTCOMES(COS)</b>	
CO-1	Understand the concept of Advertisement
CO-2	Gain the knowledge on Integrated Marketing Communications
CO-3	Examine the Role of Brand in Sports Advertisements

**PSM18 DE108 SPORTS MEDIA & EVENT MANAGEMENT**

<b>COURSE OUTCOMES(COS)</b>	
CO-1	Know the concept of Sports Media
CO-2	Acquire in–depth knowledge on Sports Journalism
CO-3	Understand the types of Channels available for Event Management

**PSM18G E301 MANAGEMENT CONCEPTS**

<b>COURSE OUTCOMES(COS)</b>	
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CO-1	Gain the knowledge on fundamentals of Management
CO-2	Take effective Decision in the Business Environment
CO-3	Exhibit Corporate Social Responsibility

### **PSM18 GE302 BUSINESS COMMUNICATION**

<b>COURSE OUTCOMES</b>	
CO-1	Understand the basics of Communication
CO-2	Communicate effectively through different Medias
CO-3	Realize the benefits of Public Relations

### **PSM18 GE401 ENTREPRENEURSHIP DEVELOPMENT**

<b>COURSE OUTCOMES(COS)</b>	
CO-1	Understand the Concept of Entrepreneurship
CO-2	Gain the Knowledge and Importance of Entrepreneurship
CO-3	Basic Functions of an Entrepreneur

### **PSM18 GE402 EVENT MANAGEMENT**

<b>COURSE OUTCOMES(COS)</b>	
CO-1	Know about Sports Events – Planning of Sports Events
CO-2	Commercialization of Sports Events
CO-3	Exhibit social responsibility through Sports Events

## **PROGRAMME: M.Sc.**

### **SPORTS PSYCHOLOGY AND SOCIOLOGY**

#### **PROGRAM EDUCATIONAL OBJECTIVES**

**PEO-1:** To produce students with effective interpersonal skills and psycho-social skills to help athletes to excel in sports profession

**PEO-2:** To enable the student to articulate the skill sets desired by employers who hire or select people who demonstrate the knowledge of Psychology and Sociology in sports.

#### **PROGRAM OUTCOME**

**PO1:** Demonstrate fundamental knowledge and comprehension of the major concepts, theoretical perspectives, and empirical findings to discuss how psychological principles apply to behavioural problems among athletes.

**PO2:** Understand the application of psychological and sociological theories in sports.

**PO3:** Identify methods that can help teams improve their dynamics, boost their performance, recover from injuries, and overcome emotional obstacles caused by competition.

**PO4:** Articulate an approach to work effectively with diverse individual and groups by demonstrating the psychological skills and techniques to enhance sports performance

**PO5:** Demonstrate professional ethics and commitment in all aspects of professional practice.

**PO6:** Carry out researches on various domains of psychology and sociology in relation to sports.

**PO7:** Develop critical thinking and applies strategy on solving emotional and social problems in sports situations.

**PO8:** Plan to communicate to formulate effective arguments for report writing/presentation.

**PO9:** Relate to society by contributing to the society by community engagement and justify to be a responsible global citizen

**PO10:** Focus on the professional realities of working as a sports psychologist or sports sociologist.

**FIRST SEMESTER**  
**PPS18CT101 - ADVANCED GENERAL PSYCHOLOGY**  
**COURSE OUTCOMES**

**At the end of the course, the student will be able to:**

1. Apply conceptual knowledge of the core areas of Psychology and Sociology and study the diversities present.
2. Examine the knowledge related to the approaches used in the field of psychology to understand human behaviour and mental process.
3. Will be able to relate behavioural issues through theoretical approaches and methods ethically by contributing to society as a responsible citizen

**PPS18CT102: INTRODUCTION TO SPORTS SOCIOLOGY**

**COURSE OUTCOMES**

1. Understand the basics of sociological phenomenon in relation to sports.
2. Analyze social issues with a commitment to social justice and intellectual diversity in the society.
3. Understand the role that sport has in society and how sport reciprocally influences society

**PPS18CT103: RESEARCH METHODOLOGY**

**COURSE OUTCOMES**

1. Illustrate basic and applied research to address issues in psychology and sociology.
2. Understand and apply basic research methods in psychology and sociology, including research design, data analysis, and interpretation
3. Examine the importance of the use of statistical analyses and reporting of results in research publications.

**PPS18CP104: PSYCHOLOGICAL TESTING**

**Students are required to conduct and record any 08 experiments.**

**COURSE OUTCOMES**

1. Critically assess the information by administering the psychometric assessments to study human behaviour and mental processes and also forms conclusions and arguments
2. Administers psychometric tools and interprets the evaluation for framing the strategy to

- improve the sports performance and mental health of the athlete
3. Understand the ethical values of interpretation of the assessment tools.

## **SECOND SEMESTER**

### **PPS18CT201: PSYCHOLOGICAL ASPECTS OF SPORTS PERFORMANCE**

#### **COURSE OUTCOMES**

1. Relate the knowledge of psychology to assist in treating a wide range of mental health issues commonly experienced by athletes and sports industry professionals in a clinical setting.
2. Examine the link between psychological features influencing athletic activity in competitive sports.
3. Analyze how participation in sport influences the psychological make-up of those individuals involved in athletic competitions.

### **PPS18CT202: INDIAN SOCIAL SYSTEM AND SPORTS**

#### **COURSE OUTCOMES**

1. Understand multicultural Indian society, Indian sports, and the importance of recreational activities in social life
2. Gain knowledge to promote talent in traditional sports in the social system considering the role of religion, culture and family.
3. Understand the challenges faced by the sports professionals in India and the benefits of Professional sports sociologist in improving the Indian social system.

### **PPPS18CT203: SOCIAL AND BEHAVIOURAL STATISTICS**

#### **COURSE OUTCOMES**

- 1 Understand the basics of organize, manage, present data, describe and discuss the key terminology, concepts tools and techniques used in statistical analysis
2. Critically evaluate the underlying assumptions of analysis tools and discuss the issues surrounding sampling and significance
3. To develop the ability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research.

### **PPS18CP204: PSYCHOLOGICAL TESTING & ASSESSMENT – II**

## **COURSE OUTCOMES**

1. Critically assess the information by administering the psychometric assessments to study human behaviour and mental processes and also forms conclusions and arguments
2. Administers psychometric tools and interprets the evaluation for framing the strategy to improve the sports performance and mental health of the athlete
3. To develop the ability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research

### **THIRD SEMESTER**

#### **PSP18CT301: FUNDAMENTALS OF COUNSELING SKILLS**

##### **COURSE OUTCOMES**

1. Understand the factors contributing for positive outcomes in guidance and counselling
2. Access the purpose of testing and assessment understand the role of confidentiality and the limits to it in terms of the counselling and supervisory relationships.
3. In depth knowledge of ethical codes and variety of ethical dilemmas that could arise, and understand the ways in which to navigate and select the best course of action.

#### **PPS18CT302 - LIFE SPAN DEVELOPMENT**

##### **COURSE OUTCOMES**

**At the end of the course, the student will be able to:**

1. Critically assess information related to different developmental processes in a life span of a person.
2. Analyse the differences between the various methods of investigation used in developmental studies and the relationship between physiology, cognition, and emotion in the different developmental stages.
3. Identify and evaluate factors affecting the physical, social, emotional, psychological, and intellectual development of children, adolescents and aged.

#### **PPS18CT303- SOCIOLOGICAL THEORIES**

##### **COURSE OUTCOMES**

**At the end of the course, the student will be able to:**

- Describe and apply some basic theories or theoretical orientations in at least one of the social realities.

- Apply critical thinking skills to sociological data and theory. Show how patterns of thought and knowledge are directly influenced by political-economic social structures.
- Show how social issues can be better understood by emphasizing the micro/macro connections. Participate actively in civic affairs.

### **PSO18AEC02 – LIFE SKILLS MANAGEMENT**

#### **COURSE OUTCOMES**

- Demonstrate fundamental knowledge and comprehension of the major concepts, to discuss psychological principles to building life skill.
- Develop and exhibit an accurate sense of self, nurture a deep understanding of personal motivation.
- Understand and practice personal and professional responsibility, strengthen personal character and enhance ethical sense.

### **PPS18CP304: CASE STUDY AND PROJECT WORK**

#### **COURSE OUTCOMES**

- CO 1 - Identify key research questions within the demographic field on which the student will carry out independent research.
- CO 2 - Demonstrate appropriate referencing and develop skills in other aspects of academic writing.
- CO 3 - Apply the demographic/statistical research training acquired in the taught element of the programme by designing an appropriate research strategy and research methodology to carry out research.

### **FOURTH SEMESTER**

### **PPS18CT401: COUNSELING AND BEHAVIOR MODIFICATION TECHNIQUES**

#### **COURSE OUTCOMES**

1. Apply psychological knowledge and skills to address peak performance and well-being of athletes
2. Familiarize with a variety of ethical dilemmas that could arise, and understand the ways in which to navigate and select the best course of action for the athletes.
3. Integrate with the major counselling approaches and apply the effective sports performance.

## **PPS18CT302 - SCIENTIFIC DIMENSIONS OF SPORTS PSYCHOLOGY**

### **COURSE OUTCOMES**

1. Apply psychology-specific content and skills, effective self reflection, self management skills, teamwork skills, frame goals, and enhance performance, socio cultural influences and game preparation.
2. Gain knowledge about psychometrics, cognition, motivation, personality and emotion and their influence in a game.
3. Apply psychological concepts and skills in an ethical way to modify in meeting the needs of persons with a disability, and sustain participation and competition for disabled persons.

## **PPS18CT403- INTERVENTION STRATEGIES AND SPORTS BEHAVIOUR**

### **COURSE OUTCOMES**

1. Demonstrate adequate knowledge and understanding to address psychological issues faced by athletes on and off the field, both in individual and team sports.
2. Analyse how psychological factors impact sports injuries, rehabilitation and recovery of athletes.
3. Outline the intervention methods that can help athletes improve their dynamics, boost their performance, recover from injuries, and overcome emotional obstacles caused by competition.

## **PPS18CT404- THESIS**

### **COURSE OUTCOMES**

1. Familiarize with the existing trends in Research Methodology, for preparation of dissertation to instil some primary concepts of academic research.
2. Use scientific reasoning to interpret psychological phenomena, Demonstrate psychology information literacy,
3. Interpret, design, and conduct basic psychological research, incorporate socio-cultural factors in scientific inquiry.

## **M.SC. SPORTS PSYCHOLOGY**

### **PROGRAM EDUCATIONAL OBJECTIVES**

**PEO-1:** To produce students with effective interpersonal skills and psycho-social skills to help athletes to excel in sports profession

**PEO-2:** To enable the student to articulate the skill sets desired by employers who hire or select people who demonstrate the knowledge of Psychology in sports.

### **PROGRAM OUTCOME**

**PO1** Demonstrate fundamental knowledge and comprehension of the major concepts, theoretical perspectives, and empirical findings to discuss how psychological principles apply to behavioural problems

**PO2** Understand the application of psychological theories in sports.

**PO3** Identify methods that can help teams improve their dynamics, boost their performance, recover from injuries, and overcome emotional obstacles caused by competition.

**PO4** Articulate an approach to work effectively with diverse individual and groups by demonstrating the psychological skills and techniques to enhance sports performance

**PO5** Demonstrate professional ethics and commitment in all aspects of professional practice.

**PO6** Carry out researches on various domains of psychology in relation to sports.

**PO7** Develop critical thinking and applies strategy on solving emotional and social problems in sports situations.

**PO8** Plan to communicate to formulate effective arguments for report writing/presentation.

**PO9** Relate to society by contributing by community engagement and justify to be a responsible global citizen

**PO10** Focus on the professional realities of working as a sports psychologist.

**FIRST SEMESTER**  
**PSP18CT101: ADVANCED GENERAL PSYCHOLOGY**  
**COURSE OUTCOMES**

1. Apply conceptual knowledge of the core areas of Psychology (cognitive, sensory, perceptual, learning, motivation and personality) and the links between them
2. Examine the knowledge related to the approaches used in the field of psychology to understand human behaviour and mental process.
3. Will be able to relate behavioural issues through theoretical approaches and methods ethically by contributing to society as a responsible citizen

**PSP18CT102: PRINCIPLES OF SPORTS PSYCHOLOGY**  
**COURSE OUTCOMES**

1. Apply psychology-specific content and skills, effective self-reflection, self-management skills, teamwork skills, frame goals, and enhance performance, socio cultural influences and game preparation.
2. Gain knowledge about psychometrics, cognition, motivation, personality and emotion and their influence in a game.
3. Apply psychological concepts and skills required in competitive sport participation.

**PSP18CT103: RESEARCH METHODOLOGY**  
**COURSE OUTCOMES**

1. Illustrate basic and applied research to address issues in psychology.
2. Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation
3. Examine the importance of the use of statistical analyses and reporting of results in research publications.

**PSP18CP105: PSYCHOLOGICAL TESTING AND ASSESSMENT-I**

**Students are required to conduct and record any 08 experiments.**

1. Competitive State Anxiety
2. Psychological Performance
3. Locus of Control –Internal/External
4. Life Skills
5. Mental Imagery
6. Extrinsic/Intrinsic Motivation
7. Bio-feedback
8. Concentration

9. Sports Specific Personality Inventory
10. Sports Achievement Motivation
11. Reaction Time

### **COURSE OUTCOMES**

1. Critically access the information by administering the psychometric assessments to study human behaviour and mental processes.
2. Administers psychometric tools and interprets the evaluation for framing the strategy to improve the sports performance and mental health of the athlete
3. Understand the ethical values of interpretation of the assessment tools.

## **SECOND SEMESTER**

### **PSP18CT201: PSYCHOLOGICAL ASPECTS OF SPORTSPERFORMANCE**

#### **COURSE OUTCOMES**

1. Define the basics of physiological principles relevant to the effect of exercise on human functioning and performance.
2. Analyzethe different psychologicalfactors influencing individual growth and development through life time.
3. Recommend sport as a tool to enhance health and use games and physical activities to enhance individual competencies.

### **PSP18CT202: BIOLOGICAL BASES OF BEHAVIOR**

#### **COURSE OUTCOMES**

1. Understand the basics of biopsychology; examine the relationship between sports with respect to individual physiology.
2. Analyzefactors that influence on individual health and employ ways and means to optimise the same
3. Relate the role of the brain in human performance and apply psychological techniques and theories to human performance within diverse population.

### **PSP18CT203: BEHAVIORAL STATISTICS**

### **PSP18CP204– PSYCHOLOGICAL TESTING AND ASSESSMENT - II.**

#### **COURSE OUTCOMES**

1. Critically assess the information by administering the psychometric assessments to study human behaviour and mental processes and also forms conclusions and arguments
2. Administers psychometric tools and interprets the evaluation for framing the strategy to improve the sports performance and mental health of the athlete
3. To develop theability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research.

## **THIRD SEMESTER**

### **PSP18CT301: FUNDAMENTALS OF COUNSELING SKILLS COURSE OUTCOMES**

1. Understand the basics of psychological principles; professional and ethical practice in the role of counsellor in various settings.
2. Develop knowledge on career assessments related to interests, personality, values, and career development.
3. Describe the role that human growth and development in counselling interventions and gain ability for appropriate modification made in a multicultural society.

### **PSP18CT302: PSYCHOLOGY OF ATHLETIC INJURY AND REHABILITATION**

#### **COURSE OUTCOMES**

1. Understand the types of injuries and the fundamental components involved in designing a successful rehabilitation program
2. Analyze the influence of different parameters of performance, physiological, biochemical and subjective measures such as mood disturbance, perceived stress and recovery and symptoms of athlete rehabilitation monitoring and recovery process
3. Recommend adequate examination methods for muscle and skeleton injuries related to physical exercise and sports to reduce instances of re injury

### **PSP18CT303: PSYCHOLOGICAL PREPARATION AND MENTAL SKILLS TRAINING**

#### **COURSE OUTCOMES**

1. Understand the basics and apply psychological techniques and strategies to enhance sports performance and participation in sport and exercise settings.
2. Analyze the influences of social aspects (e.g., group processes, persuasion) on performance and well-beings faced by sports persons.
3. Recommend strategies to cope with the mental stress and coping skills influence sports performance, with a commitment to social justice and intellectual diversity in the society and the influence on sports on public health

### **PPS18CP304: CASE STUDY AND PROJECT WORK COURSE OUTCOMES**

- CO 1 - Identify key research questions within the demographic field on which the student will carry out independent research.
- CO 2 - Demonstrate appropriate referencing and develop skills in other aspects of academic writing.
- CO 3 - Apply the demographic/statistical research training acquired in the taught element of the programme by designing an appropriate research strategy and research methodology to carry out research.

### **PSO18AEC02 – LIFE SKILLS MANAGEMENT (AEC II) COURSE OUTCOMES**

- Demonstrate fundamental knowledge and comprehension of the major concepts, to

discuss psychological principles to building life skill.

- Develop and exhibit an accurate sense of self, nurture a deep understanding of personal motivation.
- Understand and practice personal and professional responsibility, strengthen personal character and enhance ethical sense

## **FOURTH SEMESTER**

### **PSP18CT401: COUNSELING AND BEHAVIOR MODIFICATION TECHNIQUES IN SPORTS COURSE OUTCOMES**

1. Understand theories and practices related to human development across the lifespan, goals, principles and ethics involved in counselling
2. Assess and analyse behavioural issues within day-to-day context and come up with effective strategies to resolve conflicts.
3. Recommend techniques and training to enhance mental health, building, maintaining, and utilizing counselling relationships to address mental health issues and meet client goals.

### **PSP18DSE05 - SPORTS FOR THE CHALLENGED COURSE OUTCOMES**

1. Understand limitations and exclusions imposed on the individual due to impairment
2. Analyze and come up with ways to encourage and promote the participation of persons with disabilities in mainstream sporting activities at all levels
3. Provide opportunities to use sports as a medium to engage in levels of physical activity that will benefit their health and wellness among people with a disability.

### **PSP18CT403- ATHLETIC PSYCHOPATHOLOGY COURSE OUTCOMES**

1. Understand the basics of the biological, psychological, behavioral, cognitive, humanistic-existential and sociocultural models of abnormal behavior and its influence on sports performance.
2. Analyse the different systems of classifications of maladaptive behaviour
3. Develop critical thinking and apply strategies on solving the emotional, behavioural and other psychopathological issues faced on and off the field of sporting arena and also their influence on sports performance,

### **PSP18CT404 THESIS COURSE OUTCOMES**

- 1 Enabling the students to identify a problem in their area of interest and finding ways in tackling and solving the problem
- 3 Gathering related literature and analyzing data pertaining to their study
- 4 - Gaining appropriate scientific writing skills.

## **PROGRAMME: M.PHIL.PSYCHOLOGY**

### **PROGRAM EDUCATIONAL OBJECTIVES**

**PEO-1:** To produce scholars with aptitude for research and analytical abilities, who are well-equipped to engage in doctoral research, as well as find employment in industry and the public service in relate fields.

**PEO-2:** To attain professional knowledge and practice to work in different fields of Psychology and also can become entrepreneur in their own establishments.

### **PROGRAM OUTCOME**

**PO 1:**Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

**PO 2:** Equip with vital knowledgenecessary to critically examine the background literature relevant to conduct rigorous psychological research

**PO 3:** Understand and apply basic research methods in psychology, including research design, data analysis and interpretation.

**PO 4:**Develop the knowledge and skills to engage in ethical research and practice.

**PO 5:** Show competence and the ability to use computers and other technology to conduct independent research in academic and/or applied settings.

**PO 6:**Demonstrate professional ethics, commitments and skills to engage in ethical research and in all aspects of professional practice.

**PO 7:** Develop the knowledge and skills to engage diversity and inclusion in psychological science.

**PO 8:** Develop the knowledge and skills to remain abreast of latest advancements and issues in their respective areas of research/interest.

**PO 9:**Develop strong written and oral skills to to communicate effectively in a variety of formats.

**PO10:**Use critical and creative thinking, develop an attitude of inquiry and, when possible, the scientific approach to solve problems related to behavior and mental processes necessary for professional development.

**FIRST SEMESTER**  
**MPHSPS 101 RESEARCH METHODOLOGY AND STATISTICS**

**COURSE OUTCOMES**

- CO 1 Understand and apply appropriate research methods in psychology, including research design, data analysis, and interpretation in their research work.
- CO 2 Examine and collect relevant literature and apply scientific methods and techniques in research work
- CO 3 Exhibit competency, acquire critical knowledge related to their current research, able to use critical thinking to evaluate and interpret evidence.

**MPHS17102 - AREA OF SPECIALIZATION – APPLIED PSYCHOLOGY**

**COURSE OUTCOMES**

- CO 1 Demonstrate familiarity, and apply major concepts, theoretical perspectives, empirical findings, historical trends and the core domains of psychology.
- CO 2 Learn the theories, applications and principles of the core areas of their research study undertaken.
- CO 3 Gain information related to their allied and supplementary areas of their research study undertaken, including methodologies adopted, assessment patterns and statistical tool.

**SECOND SEMESTER**

**MPHSPS 201 - AREA OF DISSERTATION**

**COURSE OUTCOMES**

- CO 1 Understand and apply psychological principles to personal, social, and organizational issues.
- CO 2 Develop the knowledge and skills to engage in ethical research with recognition, understanding, and respect for complexity of sociocultural and ethical diversity.
- CO 3 Have effective oral communication skills to disseminate research and scholarly activities like journal publications and conference proceedings

**MPHPSY202 - COMPUTER OPERATION-COMMUNICATION & EDUCATIONAL SKILLS**

**COURSE OUTCOMES**

- CO 1 Demonstrate competency and the ability to use computers and other technology to accomplish various tasks in research.
- CO 2 Apply appropriate tools to present accurate information in an effective manner.
- CO 3 Demonstrate critical and innovative thinking and display competence in oral, written communication.

## **MPHPSY 203 – DISSERTATION**

### **COURSE OUTCOMES**

- CO 1 Identify a research problem in the area of interest and apply basic research methods in psychology
- CO 2 Planning and implementation of techniques to solve their research problem.
- CO 3 Ability to gather related literature, collect, analyse data and present findings in effective scientific manner.

## **PROGRAMME: M.PHIL -SPORTS PSYCHOLOGY AND SOCIOLOGY**

### **PROGRAM EDUCATIONAL OBJECTIVES**

- PEO-1:** To produce scholars with aptitude for research and analytical abilities, who are well-equipped to engage in doctoral research, as well as can find employment in industry and the public service related to Sports Psychology and Sociology
- PEO-2:** To attain professional knowledge and practice to work in different fields of Sports Psychology and Sociology and also can become entrepreneur in their own establishments.

### **PROGRAM OUTCOME**

- PO 1:** Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in Sports Psychology and Sociology.
- PO 2:** Equip with vital knowledge necessary to critically examine the background literature relevant to conduct rigorous research in Sports Psychology and Sociology.
- PO 3:** Understand and apply basic research methods in Sports Psychology and Sociology, including research design, data analysis and interpretation.
- PO 4:** Develop the knowledge and skills to engage in ethical research and practice.
- PO 5:** Show competence and the ability to use computers and other technology to conduct independent research in academic and/or applied settings.
- PO 6:** Demonstrate professional ethics, commitments and skills to engage in ethical research and in all aspects of professional practice.
- PO 7:** Develop the knowledge and skills to engage diversity and inclusion in Sports Psychological studies.
- PO 8:** Develop the knowledge and skills to remain abreast of latest advancements and issues in their respective areas of research/interest.
- PO 9:** Develop strong written and oral skills to communicate effectively in a variety of formats.
- PO 10:** Use critical and creative thinking, develop an attitude of inquiry and, when possible, the scientific approach to solve problems related to behaviour and mental processes necessary for professional development.

## **MPHSPS 101 RESEARCH METHODOLOGY AND STATISTICS**

### **COURSE OUTCOMES**

CO 1 Understand and apply appropriate research methods in Sports Psychology and Sociology, including research design, data analysis, and interpretation in their research work.

CO 2 Examine and collect relevant literature and apply scientific methods and techniques in research work

CO3 Exhibit competency, acquire critical knowledge relate to their current research, able to use critical thinking to evaluate and interpret evidence.

## **MPHSPS 102 - SPORTS PSYCHOLOGY AND SOCIOLOGY**

### **COURSE OUTCOMES**

CO 1 - Demonstrate familiarity, and apply major concepts, theoretical perspectives, empirical findings, historical trends and the core domains of Sports Psychology and Sociology.

CO 2 Learn the theories, applications and principles of the core areas of their research study undertaken.

CO 3 Gain information related to their allied and supplementary areas of their research study undertaken, including methodologies adopted, assessment patterns and statistical tool.

## **MPHSPS 201 - AREA OF DISSERTATION**

### **COURSE OUTCOMES**

CO 1 Understand and apply principles of Sports Psychology and Sociology to personal, social, and organizational issues in individual and team sports.

CO 2 Understand and apply principles of Sports Psychology and Sociology to personal, social, and organizational issues in individual and team sports..

CO 3 Have effective oral communication skills to disseminate research and scholarly activities like journal publications and conference proceedings

## **MPHSPS 202 COMPUTER OPERATIONS, COMMUNICATIONS AND**

### **EDUCATIONAL SKILLS**

### **COURSE OUTCOMES**

CO 1 Demonstrate competency and the ability to use computers and other technology to accomplish various tasks in research.

CO 2 Apply appropriate tools to present accurate information in an effective manner.

CO 3 Demonstrate critical and innovative thinking and display competence in oral, written communication.

## **MPHSPS 203 DISSERTATION**

### **COURSE OUTCOMES**

CO 1 Identify a research problem in the area of interest and apply basic research methods in Sports Psychology and Sociology

CO 2 Planning and implementation of techniques to solve their research problem.

CO 3 Ability to gather related literature, collect, analyse data and present findings in effective scientific manner.

**M.SC. PSYCHOLOGY**  
**PROGRAM EDUCATIONAL OBJECTIVES**

**PEO-1:** To produce students with effective interpersonal skills and psycho-social skills to help individual to excel in the chosen profession

**PEO-2:** To enable the student to articulate the skill sets desired by employers who hire or select people who demonstrate the knowledge of Psychology.

**PROGRAM OUTCOME**

**PO1:** Demonstrate fundamental knowledge and comprehension of the major concepts, and theoretical perspectives.

**PO2:** Understand the application of psychological theories in real life situations

**PO3. :** Analyze the influence of psychological factors on mental processes and human behaviour.

**PO4. :** Articulate a sound psychological approach to enhance performance to work effectively with diverse individual and groups

**PO5:** Demonstrate professional ethics and commitment in all aspects of professional practice.

**PO6:** Carry out researches on various domains of psychology.

**PO7:** Develop critical thinking and applies strategy on solving emotional and social problems in daily situations.

**PO8:** Plan to communicate to formulate effective arguments for report writing/presentation.

**PO9:** Relate to society by contributing by community engagement and justify to be a responsible global citizen

**PO10:** Focus on the professional realities of working as a psychologist.

**FIRST SEMESTER**  
**PPY18CT101 - ADVANCED GENERAL PSYCHOLOGY**

**COURSE OUTCOMES**

1. Apply conceptual knowledge of the core areas of sensory process, perception, learning, intelligence and personality in Psychological context.
2. Examine the knowledge related to the approaches used in the field of psychology to understand human behaviour and mental process.
3. Will be able to relate behavioural issues through theoretical approaches and methods ethically by contributing to society as a responsible citizen.

**PPY18CT102 - BIOLOGICAL BASIS OF BEHAVIOUR**

**COURSE OUTCOMES**

1. Understand the basics of biopsychology; examine the relationship of behaviour with respect to individual physiology.
2. Analyze factors that influence on individual health and employ ways and means to optimise the same.
3. Relate the role of the brain in human performance and apply psychological techniques and theories to human performance within diverse population

**PPY18CT103- RESEARCH METHODOLOGY**

**COURSE OUTCOMES**

1. Illustrate basic and applied research to address issues in psychology.
2. Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation
3. Examine the importance of the use of statistical analyses and reporting of results in research publications.

**PPY18CP104 - PSYCHOLOGICAL TESTING AND ASSESSMENT- I**

**COURSE OUTCOMES**

1. Critically access the information by administering the psychometric assessments to study human behaviour and mental processes.
2. Administers psychometric tools and interprets the evaluation of the basic psychometric tests and read and summarize general ideas and conclusions from psychological sources

accurately.

3. Understand the ethical values of interpretation of the assessment tools.

## **SECOND SEMESTER PPY18CT201 - LIFE SPAN DEVELOPMENT**

### **COURSE OUTCOMES**

- Critically assess information related to different developmental processes in a life span of a person.
- List and evaluate the differences between the various methods of investigation used in developmental studies and the relationship between physiology, cognition, and emotion in the different developmental stages.
- Identify and evaluate factors affecting the physical, social, emotional, psychological, and intellectual development of children, adolescents and aged.

## **PPY18CT202 – PSYCHOPATHOLOGY –I**

### **COURSE OUTCOMES**

1. Understand the basics of the biological, psychological, behavioural, cognitive, humanistic-existential and sociocultural models of abnormal behaviour and its influence on individual.
2. Analyse the different systems of classifications of maladaptive behaviour
3. Develop critical thinking and apply strategies on solving the emotional, behavioural and other psychopathological issues that affect people.

## **PPY18CT203 – BEHAVIORAL STATISTICS**

### **COURSE OUTCOMES**

1. Understand the basics of organize, manage, present data, describe and discuss the key terminology, concepts tools and techniques used in business statistical analysis.
2. Critically evaluate the underlying assumptions of analysis tools and discuss the issues surrounding sampling and significance
3. To develop the ability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research.

## **PPY18CP204 - PSYCHOLOGICAL TESTING – II**

### **COURSE OUTCOMES**

1. Critically assess the information by administering the psychometric assessments to study human behaviour and mental processes and also forms conclusions and arguments
2. Administers psychometric tools and interprets the evaluation for framing the strategy to improve the sports performance and mental health of the athlete
3. To develop the ability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research.

## **THIRD SEMESTER**

### **PSP18CT301: FUNDAMENTALS OF COUNSELING SKILLS COURSE OUTCOMES**

1. Understand the basics of psychological principles; professional and ethical practice in the role of counsellor in various settings.
2. Develop knowledge on career assessments related to interests, personality, values, and career development.
3. Describe the role that human growth and development in counselling interventions and gain ability for appropriate modification made in a multicultural society.

### **PY18CT302 - ADVANCED SOCIAL PSYCHOLOGY**

#### **COURSE OUTCOMES**

1. Understand the fundamental principles, major theories, concepts and perspectives in the field of social psychology.
2. Compare and contrast the major theories, concepts, empirical findings, methods and techniques used in social psychology
3. Integrate different perspectives discussed in class to explain social behavior in humans.

### **PPY18CT 303 - PSYCHOPATHOLOGY – II COURSE OUTCOMES**

1. Critically assess the information by administering the psychometric assessments to study human behaviour and mental processes and also forms conclusions and arguments

2. Administers psychometric tools and interprets the evaluation for framing the strategy to improve the sports performance and mental health of the athlete

3. To develop the ability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research.

## **PSO18AEC02 – LIFE SKILLS MANAGEMENT( ACE II)**

### **COURSE OUTCOMES**

- Demonstrate fundamental knowledge and comprehension of the major concepts, to discuss psychological principles to building life skill.
- Develop and exhibit an accurate sense of self, nurture a deep understanding of personal motivation.
- Understand and practice personal and professional responsibility, strengthen personal character and enhance ethical sense

## **FOURTH SEMESTER**

### **SP18CT401: COUNSELING AND BEHAVIOR MODIFICATION**

#### **COURSE OUTCOMES**

1. Understand theories and practices related to human development across the lifespan, goals, principles and ethics involved in counselling
2. Assess and analyse behavioural issues within day-to-day context and come up with effective strategies to resolve conflicts.
3. Recommend techniques and training to enhance mental health, building, maintaining, and utilizing counselling relationships to address mental health issues and meet client goals.

### **PPY18CT402: ORGANIZATIONAL BEHAVIOUR**

#### **COURSE OUTCOMES**

1. Acquire and develop skill to take rational decisions in the process of O.B. People have always been regarded as important in managing organizations.
2. Critically evaluate the human aspects are critical in each functional aspect of management and equally so for the effective utilization of resources and analyze the complexities associated

with management of the group behavior in the organization.

3. Demonstrate how the organizational behavior can integrate in understanding the motivation behind behavior of people in the organization

### **PPY18CT403 - TRAINING AND DEVELOPMENT**

#### **COURSE OUTCOMES**

1. Understand the explain the role of training and development in human resources management and describe the psychology of the learning process in training and development process.
2. Critically evaluate the different process of assessment, design and implement various methods, techniques and sources of training.
3. To develop the students' ability to evaluate the value of the training once completed from the individual and the organization's viewpoint

### **PPY18CT404 - THESIS**

#### **COURSE OUTCOMES**

- 1 Enabling the students to identify a problem in their area of interest and finding ways in tackling and solving the problem
- 3 Gathering related literature and analyzing data pertaining to their study
- 4 - Gaining appropriate scientific writing skills.

#### **List of discipline Specific Electives**

<b>Paper Code</b>	<b>PAPER TITLE</b>
<b>PPY18DSE01</b>	<b>Managerial Psychology</b>
<b>PPY18DSE02</b>	<b>Social Problems and Issues</b>
<b>PPY18DSE03</b>	<b>Classroom Psychology</b>
<b>PPY18DSE04</b>	<b>Psychometrics</b>

<b>PPY18DSE05</b>	<b>MARKETING AND CONSUMER BEHAVIOUR</b>
<b>PPY18DSE06</b>	<b>Psychology of Interpersonal Relationship</b>
<b>PPY18DSE07</b>	<b>Coping with Stress</b>
<b>PPY18DSE08</b>	<b>Positive Psychology</b>

### **PPY18DSE01 - MANAGERIAL PSYCHOLOGY**

#### **COURSE OUTCOMES**

1. Understand the basic psychological principles in the organisation hierarchy which focuses on the efficacy of individuals, groups and organizations in the workplace.
2. Critically evaluate the underlying assumptions of analysis tools and discuss the issues surrounding sampling and significance of psychological patterns among individuals and groups in a way that will benefit the organisation.
3. To develop ability to identify skills, motivate, develop and persuade others, train and screen job applicants, assist with organizational development, and consult with corporations on a problem-solving basis.

### **PPY18DSE02 - SOCIAL PROBLEMS AND ISSUES**

#### **COURSE OUTCOMES**

1. Understand the basics of sociological perspective to the study of social problems, including their identification, analyses of causes and consequences of issues existing in society
2. Critically evaluate the underlying assumptions of topics such as inequality, poverty, crime and delinquency, substance abuse, discrimination, domestic violence, the environment, global stratification, and international conflict
3. Analyse the causes and consequences of social problems and participate as active citizens in their societies and communities, demonstrating respect for diversity, critical thinking, and collaboration in problem-solving.

## **PPY18DSE03: CLASSROOM PSYCHOLOGY**

### **COURSE OUTCOMES**

1. Understand the basics about both general and special education, school systems and structures other educational and related services; understand schools and other settings as systems.
2. Exhibit the ability to work with individuals and groups to facilitate practices that create and maintain safe and effective learning environments for children and others.
3. Assess learning and scored in a standardized fashion and systematically collects and disseminates information essential to data-based decision-making process.

## **PSP18DSE04: PSYCHOMETRICS**

### **COURSE OUTCOMES**

1. Understand the basics of psychological measurement and tests; examine the relation to psychometrics and its importance in research.
2. Analyze the difference between psychological tests and psychometric tests
3. Recommend appropriate tools in accordance with reliability and validity and other guidelines to be followed in different settings.

## **PSP18DSE05: MARKETING AND CONSUMER BEHAVIOUR**

### **COURSE OUTCOMES**

1. Understand the basics of marketing management and strategies.
2. Analyze the need and development of new product
3. Recommend appropriate measures to study influences on consumer behaviour and enhance marketing.

## **PPY18DSE05 - PSYCHOLOGY OF INTERPERSONAL RELATIONSHIP**

### **COURSE OUTCOMES**

1. Understand the basics of theories and practice in verbal and nonverbal communication with a focus on interpersonal relationships.
2. Critically evaluate the underlying assumptions of analysis tools of communication to express feelings, to imagine, to influence, and to meet social expectations.
3. To develop ability of competent communication in interpersonal interactions, to understand

how and why relationships develop, to practice effective conflict management techniques.

### **PPY18DSE06: COPING WITH STRESS**

#### **COURSE OUTCOMES**

1. Acquire an in-depth knowledge of coping process and its effect on emotional mental and behavioural aspects of an individual.
2. Develop mechanisms to cope with stress and attempt to overcome or diminish the amount of stress experienced.
3. Using research in finding conventional methods to focus on the stressor itself, using evidence-based approaches to either removing or coming to terms with the stressful situation.

### **PPY18DSE07- POSTIVE PSYCHOLOGY**

#### **COURSE OUTCOMES**

1. Understanding of the aim and scope of positive psychology and implications to well-being
2. Critically evaluate the underlying assumptions of the science and application of positive psychology to biological, psychological, social and emotional outcomes
3. Apply core concepts of positive psychology and resiliency factors into their own lives and professional practice

**PROGRAMME: M.Phil.**

**SPORTS PSYCHOLOGY**

**PROGRAM EDUCATIONAL OBJECTIVES**

**PEO-1:** To produce scholars with aptitude for research and analytical abilities, who are well-equipped to engage in doctoral research, as well as can find employment in industry and the public service related to Sports Psychology.

**PEO-2:** To attain professional knowledge and practice to work in different fields of Sports Psychology and also can become entrepreneur in their own establishments.

**PROGRAM OUTCOME**

**PO 1:** Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in Sports Psychology.

**PO 2:** Equip with vital knowledge necessary to critically examine the background literature relevant to conduct rigorous research in Sports Psychology.

**PO 3:** Understand and apply basic research methods in Sports Psychology, including research design, data analysis and interpretation.

**PO 4:** Develop the knowledge and skills to engage in ethical research and practice.

**PO 5:** Show competence and the ability to use computers and other technology to conduct independent research in academic and/or applied settings.

**PO 6:** Demonstrate professional ethics, commitments and skills to engage in ethical research and in all aspects of professional practice.

**PO 7:** Develop the knowledge and skills to engage diversity and inclusion in Sports Psychological studies.

**PO 8:** Develop the knowledge and skills to remain abreast of latest advancements and issues in their respective areas of research/interest.

**PO 9:** Develop strong written and oral skills to communicate effectively in a variety of formats.

**PO 10:** Use critical and creative thinking, develop an attitude of inquiry and, when possible, the scientific approach to solve problems related to behaviour and mental processes necessary for professional development

**FIRST SEMESTER**  
**MPHSPS 101 RESEARCH METHODOLOGY AND STATISTICS**

**COURSE OUTCOMES**

- CO 1 Understand and apply appropriate research methods in Sports Psychology, including research design, data analysis, and interpretation in their research work.
- CO 2 Examine and collect relevant literature and apply scientific methods and techniques in research work
- CO3 Exhibit competency, acquire critical knowledge relate to their current research, able to use critical thinking to evaluate and interpret evidence.

**MPHS17102 - Area of Specialization - Applied Sports Psychology**  
**COURSE OUTCOMES**

- CO 1 - Demonstrate familiarity, and apply major concepts, theoretical perspectives, empirical findings, historical trends and the core domains of Sports Psychology.
- CO 2 Learn the theories, applications and principles of the core areas of their research study undertaken.
- CO 3 Gain information related to their allied and supplementary areas of their research study undertaken, including methodologies adopted, assessment patterns and statistical tool.

**SECOND SEMESTER**  
**MPHSPS 201 - AREA OF DISSERTATION**

**COURSE OUTCOMES**

- CO 1 Understand and apply principles of Sports Psychology to personal, social, and organizational issues.
- CO 2 Develop the knowledge and skills to engage in ethical research with recognition, understanding, and respect for complexity of sociocultural and ethical diversity.
- CO 3 Have effective oral communication skills to disseminate research and scholarly activities like journal publications and conference proceedings

**MPHPSY202 - Computer Operation-Communication & Educational Skills**  
**COMPUTER OPERATIONS – SYLLABUS - PRACTICALS**

**COURSE OUTCOMES**

- CO 1 Demonstrate competency and the ability to use computers and other technology to accomplish various tasks in research.
- CO 2 Apply appropriate tools to present accurate information in an effective manner.
- CO 3 Demonstrate critical and innovative thinking and display competence in oral, written communication.

## MPHPSY 203 – Dissertation

### COURSE OUTCOMES

**At the end of the course, the student will be able to:**

CO 1 Identify a research problem in the area of interest and apply basic research methods in Sports Psychology

CO 2 Planning and implementation of techniques to solve their research problem.

CO 3 Ability to gather related literature, collect, analyse data and present findings in effective scientific manner.

### PROGRAM SPECIFIC OUTCOME-PSYCHOLOGY

<b>PSO-I</b>	Graduates will be able to analyse, articulate and enable the individuals to understand their behavior and managing them to lead a better living.
<b>PSO-2</b>	Graduates will be able to create positive changes by empowered and diversified approaches towards the promotion of health and wellness.

### FIRST SEMESTER

#### PPY18CT101- Advanced General Psychology

<b>CO1</b>	Apply conceptual knowledge of the core areas of sensory process, perception, learning, intelligence and personality in Psychological context.
<b>CO2</b>	Examine the knowledge related to the approaches used in the field of psychology to understand human behaviour and mental process.
<b>CO3</b>	Will be able to relate behavioural issues through theoretical approaches and methods ethically by contributing to society as a responsible citizen

#### PPY18CT102 Biological Basis of Behaviour

<b>CO1</b>	Understand the basics of biopsychology; examine the relationship of behaviour with respect to individual physiology
<b>CO2</b>	Analyze factors that influence on individual health and employ ways and means to optimise the same
<b>CO3</b>	Relate the role of the brain in human performance and apply psychological techniques and theories to human performance within diverse population

### **PPY18CT103 Research Methodology**

<b>C01</b>	Illustrate basic and applied research to address issues in psychology.
<b>C02</b>	Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation
<b>C03</b>	Examine the importance of the use of statistical analyses and reporting of results in research publications

### **PPY18CP104 Psychological Testing I**

<b>C01</b>	Critically access the information by administering the psychometric assessments to study human behaviour and mental processes.
<b>C02</b>	Administers psychometric tools and interprets the evaluation of the basic psychometric tests and read and summarize general ideas and conclusions from psychological sources accurately
<b>C03</b>	Understand the ethical values of interpretation of the assessment tools.

## **SECOND SEMESTER**

### **PPY18CT201 Life Span Development**

<b>C01</b>	Critically assess information related to different developmental processes in a life span of a person
<b>C02</b>	List and evaluate the differences between the various methods of investigation used in developmental studies and the relationship between physiology, cognition, and emotion in the different developmental stages
<b>C03</b>	Identify and evaluate factors affecting the physical, social, emotional, psychological, and intellectual development of children, adolescents and aged.

### **PPY18CT202 Psychopathology – I**

<b>C01</b>	Understand the basics of the biological, psychological, behavioural, cognitive, humanistic-existential and sociocultural models of abnormal behaviour and its influence on individual
<b>C02</b>	Analyse the different systems of classifications of maladaptive behaviour
<b>C03</b>	Develop critical thinking and apply strategies on solving the emotional, behavioural and other psychopathological issues that affect people

### **PPY18CT203 Behavioural Statistics**

<b>C01</b>	Understand the basics of organize, manage, present data, describe and discuss the key terminology, concepts tools and techniques used in business statistical analysis.
<b>C02</b>	Critically evaluate the underlying assumptions of analysis tools and discuss the issues surrounding sampling and significance

<b>CO3</b>	To develop the ability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research
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### **PPY18CP204 Psychological Testing & Assessment – II**

<b>CO1</b>	Critically assess the information by administering the psychometric assessments to study human behaviour and mental processes and also forms conclusions and arguments
<b>CO2</b>	Administers psychometric tools and interprets the evaluation for framing the strategy to improve performance as the individual and group
<b>CO3</b>	To develop the ability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research.

### **THIRD SEMESTER**

#### **PPY18CT301 fundamentals of Counseling Skills**

<b>CO1</b>	Understand the basics of psychological principles; professional and ethical practice in the role of counsellor in various settings.
<b>CO2</b>	Develop knowledge on career assessments related to interests, personality, values, and career development.
<b>CO3</b>	Describe the role that human growth and development in counselling interventions and gain ability for appropriate modification made in a multicultural society.

#### **PPY18CT302 Advanced Social Psychology**

<b>CO1</b>	Understand the fundamental principles, major theories, concepts and perspectives in the field of social psychology
<b>CO2</b>	Compare and contrast the major theories, concepts, empirical findings, methods and techniques used in social psychology
<b>CO3</b>	Integrate different perspectives discussed in class to explain social behavior in humans

#### **PPY18CT303 Psychopathology – II**

<b>CO1</b>	Understand the basics of the biological, psychological, behavioural, cognitive, humanistic-existential and sociocultural models of abnormal behaviour and its influence on individual.
<b>CO2</b>	Analyse the different systems of classifications of maladaptive behaviour
<b>CO3</b>	Develop critical thinking and apply strategies on solving the emotional, behavioural and other psychopathological issues that affect people.

### **FOURTH SEMESTER**

#### **PPY18CT401 Counseling and Behavior Modification**

<b>CO1</b>	Understand theories and practices related to human development across the lifespan, goals, principles and ethics involved in counselling
<b>CO2</b>	Assess and analyse behavioural issues with in day-to-day context and come up effective strategies to resolve conflicts.

<b>CO3</b>	Recommend techniques and training to enhance mental health, building, maintaining, and utilizing counselling relationships to address mental health issues and meet client goals
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### **PPY18CT402 Organizational Behaviour**

<b>CO1</b>	Acquire and develop skill to take rational decisions in the process of O.B. People have always been regarded as important in managing organizations
<b>CO2</b>	Critically evaluate the human aspects are critical in each functional aspects of management and equally so for the effective utilization of resources and analyze the complexities associated with management of the group behavior in the organization.
<b>CO3</b>	Demonstrate how the organizational behavior can integrate in understanding the motivation behind behavior of people in the organization

### **PPY18CT403 Training and Development**

<b>CO1</b>	Understand the explain the role of training and development in human resources management and describe the psychology of the learning process in training and development process.
<b>CO2</b>	Critically evaluate the different process of assessment, design and implement various methods, techniques and sources of training.
<b>CO3</b>	To develop the students' ability to evaluate the value of the training once completed from the individual and the organization's viewpoint

### **PPY18CT404 Thesis**

<b>CO1</b>	Enabling the students to identify a problem in their area of interest and finding ways in tackling and solving the problem
<b>CO2</b>	Gathering related literature and analyzing data pertaining to their study
<b>CO3</b>	Gaining appropriate scientific writing skills

### **PROGRAM SPECIFIC OUTCOME - SPORTS PSYCHOLOGY AND SOCIOLOGY**

<b>PSO-I</b>	Graduates will be able to analyse, articulate with concrete psycho-social skills, enabling the individuals to understand their behavior and managing them for enhanced sports performance.
<b>PSO-2</b>	Graduates will be able to create positive changes by empowered and diversified approaches towards the promotion of health and wellness.

**FIRST SEMESTER**  
**PPS18CT101 - Advanced General Psychology**

<b>CO1</b>	Apply conceptual knowledge of the core areas of sensory process, perception, learning intelligence and personality in Psychological context.
<b>CO2</b>	Examine the knowledge related to the approaches used in the field of psychology understand human behaviour and mental process.
<b>CO3</b>	Will be able to relate behavioural issues through theoretical approaches and methods ethically by contributing to society as a responsible citizen

**PPS18CT102: Introduction to Sports Sociology**

<b>CO1</b>	Understand the basics of sociological phenomenon in relation to sports.
<b>CO2</b>	Analyze social issues with a commitment to social justice and intellectual diversity in the society.
<b>CO3</b>	Understand the role that sport has in society and how sport reciprocally influences society

**PPS18CT103: Research Methodology**

<b>CO1</b>	Illustrate basic and applied research to address issues in psychology and sociology
<b>CO2</b>	Understand and apply basic research methods in psychology and sociology, including research design, data analysis, and interpretation
<b>CO3</b>	Examine the importance of the use of statistical analyses and reporting of results research publications.

**PPS18CP104: Psychological Testing-1**

<b>CO1</b>	Critically assess the information by administering the psychometric assessments to study human behaviour and mental processes and also forms conclusions and arguments,
<b>CO2</b>	Administers psychometric tools and interprets the evaluation for framing the strategy improve the sports performance and mental health of the athlete.
<b>CO3</b>	Understand the ethical values of interpretation of the assessment tools.

**SECOND SEMESTER**

**PPS18CT201: Psychological Aspects of Sports Performance**

<b>CO1</b>	Relate the knowledge of psychology to assist in treating a wide range of mental health issues commonly experienced by athletes and sports industry professionals in a clinical setting.
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<b>CO2</b>	Examine the link between psychological features influencing athletic activity competitive sports.
<b>CO3</b>	Analyze how participation in sport influences the psychological make-up of those individuals involved in athletic competitions.

**PPS18CT202: Indian Social System and Sports**

<b>CO1</b>	Understand multicultural Indian society, Indian sports, and the importance recreational activities in social life
<b>CO2</b>	Gain knowledge to promote talent in traditional sports in the social system considering the role of religion, culture and family
<b>CO3</b>	Understand the challenges faced by the sports professionals in India and the benefits Professional sports sociologist in improving the Indian social system.

**PPPS18CT203: Social and Behavioural Statistics**

<b>CO1</b>	Understand the basics of organize, manage, present data, describe and discuss the key terminology, concepts tools and techniques used in statistical analysis
<b>CO2</b>	Critically evaluate the underlying assumptions of analysis tools and discuss the issues surrounding sampling and significance
<b>CO3</b>	To develop the ability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research.

**PPS18CP204: Psychological Testing & Assessment – II**

<b>CO1</b>	Critically assess the information by administering the psychometric assessments to study human behaviour and mental processes and also forms conclusions and arguments
<b>CO2</b>	Administers psychometric tools and interprets the evaluation for framing the strategy to improve the sports performance and mental health of the athlete
<b>CO3</b>	To develop the ability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research

**THIRD SEMESTER**

**PSP18CT301: Fundamentals of Counseling Skills**

<b>CO1</b>	Understand the factors contributing for positive outcomes in guidance and counselling
<b>CO2</b>	Access the purpose of testing and assessment understand the role of confidentiality and the limits to it in terms of the counselling and supervisory relationships.
<b>CO3</b>	Access the purpose of testing and assessment understand the role of confidentiality and the limits to it in terms of the counselling and supervisory relationships.

### **PPS18CT302 - Life Span Development**

<b>CO1</b>	Critically assess information related to different developmental processes in a life span of a person.
<b>CO2</b>	Analyse the differences between the various methods of investigation used in developmental studies and the relationship between physiology, cognition, and emotion in the different developmental stages.
<b>CO3</b>	Identify and evaluate factors affecting the physical, social, emotional, psychological, and intellectual development of children, adolescents and aged.

### **PPS18CT303- Sociological Theories**

<b>CO1</b>	Describe and apply some basic theories or theoretical orientations in at least one of the social realities.
<b>CO2</b>	Apply critical thinking skills to sociological data and theory. Show how patterns of thought and knowledge are directly influenced by political-economic social structures.
<b>CO3</b>	Show how social issues can be better understood by emphasizing the micro/macro connections. Participate actively in civic affairs.

### **PSO18AEC02 – Life Skills Management**

<b>CO1</b>	Demonstrate fundamental knowledge and comprehension of the major concepts, to discuss psychological principles to building life skill.
<b>CO2</b>	Develop and exhibit and accurate sense of self, nurture a deep understanding of personal motivation.

<b>CO3</b>	Understand and practice personal and professional responsibility, strengthen personal character and enhance ethical sense
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### **PPS18CP304: Case Study and Project Work**

<b>CO1</b>	Identify key research questions within the demographic field on which the student will carry out independent research.
<b>CO2</b>	Demonstrate appropriate referencing and develop skills in other aspects of academic writing.
<b>CO3</b>	Apply the demographic/statistical research training acquired in the taught element of the programme by designing an appropriate research strategy and research methodology to carry out research

### **FOURTH SEMESTER**

#### **PPS18CT401: Counseling and Behavior Modification Techniques**

<b>CO1</b>	Apply psychological knowledge and skills to address peak performance and well-being of athletes
<b>CO2</b>	Familiarize with a variety of ethical dilemmas that could arise, and understand the ways in which to navigate and select the best course of action for the athletes.
<b>CO3</b>	Integrate with the major counselling approaches and apply the effective sports performance

#### **PPS18CT302 - Scientific Dimensions of Sports Psychology**

<b>CO1</b>	Apply psychology-specific content and skills, effective self reflection, self management skill teamwork skills, frame goals, and enhance performance, socio cultural influences and ga preparation.
<b>CO2</b>	Gain knowledge about psychometrics, cognition, motivation, personality and emotion and their influence in a game
<b>CO3</b>	Apply psychological concepts and skills in an ethical way to modify in meeting the needs of persons with a disability, and sustain participation and competition for disabled persons

#### **PPS18CT403- Intervention Strategies and Sports Behaviour**

<b>CO1</b>	Demonstrate adequate knowledge and understanding to address psychological issues faced by athletes on and off the field, both in individual and team sports
<b>CO2</b>	Analyse how psychological factors impact sports injuries, rehabilitation and recovery of athletes.
<b>CO3</b>	Outline the intervention methods that can help athletes improve their dynamics, boost their performance, recover from injuries, and overcome emotional obstacles caused by competition.

### PPS18CT404- Thesis

<b>CO1</b>	Familiarize with the existing trends in Research Methodology, for preparation of dissertation to instil some primary concepts of academic research
<b>CO2</b>	Use scientific reasoning to interpret psychological phenomena, Demonstrate psychology information literacy.
<b>CO3</b>	Interpret, design, and conduct basic psychological research, incorporate socio-cultural factors in scientific inquiry

### PROGRAM SPECIFIC OUTCOME - SPORTS PSYCHOLOGY

<b>PSO-I</b>	Graduates will be able to analyse, articulate with sound psychological skills and techniques, enabling the athletes to work effectively for enhanced sports performance.
<b>PSO-2</b>	Graduates will be able to create positive changes by empowered and diversified approaches towards the promotion of health and wellness.

### FIRST SEMESTER

#### PSP18CT101: Advanced General Psychology

<b>CO1</b>	Apply conceptual knowledge of the core areas of Psychology (cognitive, sensory, perceptual, learning, motivation and personality) and the links between them
<b>CO2</b>	Examine the knowledge related to the approaches used in the field of psychology to understand human behaviour and mental process.
<b>CO3</b>	Will be able to relate behavioural issues through theoretical approaches and methods ethically by contributing to society as a responsible citizen

#### PSP18CT102: Principles of Sports Psychology

<b>CO1</b>	Apply psychology-specific content and skills, effective self-reflection, self-management skills, teamwork skills, frame goals, and enhance performance socio-cultural influences and game preparation.
<b>CO2</b>	Gain knowledge about psychometrics, cognition, motivation, personality and emotion and their influence in a game.
<b>CO3</b>	Apply psychological concepts and skills required in competitive sport participation

### **PPY18CT103: Research Methodology**

<b>CO1</b>	Illustrate basic and applied research to address issues in psychology
<b>CO2</b>	Understand and apply basic research methods in psychology and sociology, including research design, data analysis, and interpretation
<b>CO3</b>	Examine the importance of the use of statistical analyses and reporting of result in research publications

### **PSP18CP104: Psychological Testing And Assessment-I**

<b>CO1</b>	Critically access the information by administering the psychometric assessme to study human behaviour and mental processes.
<b>CO2</b>	Administers psychometric tools and interprets the evaluation for framing t strategy to improve the sports performance and mental health of the athlete
<b>CO3</b>	Understand the ethical values of interpretation of the assessment tools.

## **SECOND SEMESTER**

### **PSP18CT201: Psychological Aspects of Sports Performance**

<b>CO1</b>	Define the basics of physiological principles relevant to the effect of exercise on human functioning and performance and examine the relation to sports with respect to socio cultural influences in a society.
<b>CO2</b>	Analyze the different psychological factors influencing individual growth and development through life time
<b>CO3</b>	Recommend sport as a community building activity, use games and physical activities to enhance individual competencies

### **PSP18CT202: Biological Bases of Behavior**

<b>CO1</b>	Understand the basics of biopsychology; examine the relation to sports with respect to individual physiology.
<b>CO2</b>	Analyze factors that influence on individual health and employ ways and mean to optimise the same
<b>CO3</b>	Relate the role of the brain in human performance and apply psychological techniques and theories to human performance within diverse population.

### **PSP18CT203: Behavioral Statistics**

<b>CO1</b>	Understand the basics of organize, manage, present data, describe and discuss the key terminology, concepts tools and techniques used in business statistical analysis
<b>CO2</b>	Critically evaluate the underlying assumptions of analysis tools and discuss the issues surrounding sampling and significance
<b>CO3</b>	To develop the students' ability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research.

### **PSP18CP204– Psychological Testing and Assessment - II**

<b>CO1</b>	Understand the basics of organize, manage, present data, describe and discuss the key terminology, concepts tools and techniques used in business statistical analysis
<b>CO2</b>	Critically evaluate the underlying assumptions of analysis tools and discuss the issues surrounding sampling and significance
<b>CO3</b>	To develop the students ability to deal with numerical and quantitative issues in behavioural sciences and effective use of statistical and graphical techniques wherever relevant in their research

### **THIRD SEMESTER**

#### **PSP18CT301: Fundamentals of Counseling Skills**

<b>CO1</b>	Understand the basics of psychological principles; professional and ethical practice in the role of counsellor in various settings.
<b>CO2</b>	Develop knowledge on career assessments related to interests, personality, values, and career development.
<b>CO3</b>	Describe the role that human growth and development in counselling interventions and to appropriate modification made in a multicultural society.

#### **PSP18CT302: Psychology of Athletic Injury and Rehabilitation**

<b>CO1</b>	Understand the types of injuries and the fundamental components involved in designing a successful rehabilitation program
<b>CO2</b>	Analyze the influence of different parameters of performance, physiological, biochemical and subjective measures such as mood disturbance, perceived stress and recovery and symptoms of athlete rehabilitation monitoring and recovery process
<b>CO3</b>	Recommend adequate examination methods for muscle and skeleton injuries related to physical exercise and sports to reduce instances of reinjury

#### **PSP18CT303: Psychological Preparation and Mental Skills Training**

<b>CO1</b>	Understand the basics and apply psychological techniques and strategies to enhance sports performance and participation in sport and exercise settings.
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<b>CO2</b>	Analyze the influences of social aspects (e.g., group processes, persuasion) on performance and well-beings faced by sports persons.
<b>CO3</b>	Recommend strategies to cope with the mental stress and coping skills influence sports performance, with a commitment to social justice and intellectual diversity in the society and the influence on sports on public health

## **FOURTH SEMESTER**

### **PSP18CT401: Counseling and Behavior Modification Techniques in Sports**

<b>CO1</b>	Understand theories and practices related to human development across the lifespan, goals, principles and ethics involved in counselling
<b>CO2</b>	Assess and analyse behavioural issues with in day-to-day context and come up effective strategies to resolve
<b>CO3</b>	Recommend techniques and training to enhance mental health , building, maintaining, and utilizing counselling relationships to address mental health issues and meet client goals.

### **PSP18CT402: Sports for the Challenged**

<b>CO1</b>	Understand limitations and exclusions were imposed on the individual due to impairment
<b>CO2</b>	Analyze and come up with ways to encourage and promote the participation of persons with disabilities in mainstream sporting activities at all levels
<b>CO3</b>	Provide opportunities to use sports as a medium to engage in levels of physical activity that will benefit their health and wellness among people with a disability.

### **PSP18CT403: Athletic Psychopathology**

<b>CO1</b>	Understand the basics of the biological, psychological, behavioral, cognitive, humanistic-existential and sociocultural models of abnormal behavior and its influence on sports performance.
<b>CO2</b>	Analyse the different systems of classifications of maladaptive behaviour
<b>CO3</b>	Develop critical thinking and apply strategies on solving the emotional, behavioural and other psychopathological issues faced on and off the field of sporting arena and also their influence sports performance

### **PSP18CT404: Thesis**

<b>CO1</b>	Enabling the students to identify a problem in their area of interest and finding ways in tackling and solving the problem
<b>CO2</b>	Gathering related literature and analyzing data pertaining to their study
<b>CO3</b>	Gaining appropriate scientific writing skills.

## **PROGRAM SPECIFIC OUTCOME – M Phil Applied Psychology**

<b>PSO-1</b>	Research scholars will have requisite knowledge to conduct research, analyse, articulate with concrete psychological skills, enabling the individuals to understand their behavior and managing them for enhanced individual wellbeing.
<b>PSO-2</b>	Research Scholars will be able to adhere to professional standards and expectations, create positive changes by empowered and diversified approaches towards the promotion of health and wellness in society.

### **FIRST SEMESTER**

#### **MPHSPS 101 RESEARCH METHODOLOGY AND STATISTICS**

<b>CO1</b>	Understand and apply appropriate research methods in psychology, including research design, data analysis, and interpretation in their research work.
<b>CO2</b>	Examine and collect relevant literature and apply scientific methods and techniques in research work
<b>CO3</b>	Exhibit competency, acquire critical knowledge relate to their current research, able to use critical thinking to evaluate and interpret evidence

#### **MPHS17102 - AREA OF SPECIALIZATION – APPLIED PSYCHOLOGY**

<b>CO1</b>	Demonstrate familiarity, and apply major concepts, theoretical perspectives, empirical findings, historical trends and the core domains of psychology.
<b>CO2</b>	Learn the theories, applications and principles of the core areas of their research study undertaken.
<b>CO3</b>	Gain information related to their allied and supplementary areas of their research study undertaken, including methodologies adopted, assessment patterns and statistical tool.

### **SECOND SEMESTER**

#### **MPHSPS 201 - AREA OF DISSERTATION**

<b>CO1</b>	Understand and apply psychological principles to personal, social, and organizational issues.
<b>CO2</b>	Develop the knowledge and skills to engage in ethical research with recognition understanding, and respect for complexity of sociocultural and ethical diversity.

<b>CO3</b>	Have effective oral communication skills to disseminate research and scholarly activities like journal publications and conference proceedings
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**MPHPSY202 - COMPUTER OPERATION-COMMUNICATION  
& EDUCATIONAL SKILLS**

<b>CO1</b>	Demonstrate competency and the ability to use computers and other technology to accomplish various tasks in research.
<b>CO2</b>	Apply appropriate tools to present accurate information in an effective manner.
<b>CO3</b>	Demonstrate critical and innovative thinking and display competence in or written communication.

**MPHPSY 203 – DISSERTATION**

<b>CO1</b>	Identify a research problem in the area of interest and apply basic research methods in psychology
<b>CO2</b>	Planning and implementation of techniques to solve their research problem
<b>CO3</b>	Ability to gather related literature, collect, analyse data and present findings in effective scientific manner

**PROGRAM SPECIFIC OUTCOME – M PHIL SPORTS PSYCHOLOGY**

<b>PSO-I</b>	Research scholars will have requisite knowledge to conduct research, analyse, articulate with concrete psychological skills, enabling athletes to understand their behavior and managing them for enhanced their performance on and off the field.
<b>PSO-2</b>	Research Scholars will be able to adhere to professional standards and expectations, create positive changes by empowered and diversified approaches towards the promotion of health and wellness among sports personnel.

**FIRST SEMESTER**

**MPHSPS 101 RESEARCH METHODOLOGY AND STATISTICS**

<b>CO1</b>	Understand and apply appropriate research methods in Sports Psychology, including research design, data analysis, and interpretation in their research work
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<b>CO2</b>	Examine and collect relevant literature and apply scientific methods and techniques in research work
<b>CO3</b>	Exhibit competency, acquire critical knowledge relate to the current research, able to use critical thinking to evaluate and interpret evidence.

**MPHS17102 - AREA OF SPECIALIZATION - APPLIED SPORTS  
PSYCHOLOGY**

<b>CO1</b>	Demonstrate familiarity, and apply major concepts, theoretical perspectives, empirical findings, historical trends and the core domains of Sports Psychology
<b>CO2</b>	Learn the theories, applications and principles of the core areas of their research study undertaken.
<b>CO3</b>	Gain information related to their allied and supplementary areas of their research study undertaken, including methodologies adopted assessment patterns and statistical tool.

**SECOND SEMESTER  
MPHSPS 201 - AREA OF DISSERTATION**

<b>CO1</b>	Understand and apply principles of Sports Psychology to personal, social, and organizational issues
<b>CO2</b>	Develop the knowledge and skills to engage in ethical research with recognition, understanding, and respect for complexity of sociocultural and ethical diversity.
<b>CO3</b>	Have effective oral communication skills to disseminate research and scholarly activities like journal publications and conference proceedings

**MPHPSY202 - COMPUTER OPERATION-COMMUNICATION  
& EDUCATIONAL SKILLS**

<b>CO1</b>	Demonstrate competency and the ability to use computers and other technology to accomplish various tasks in research
<b>CO2</b>	Apply appropriate tools to present accurate information in an effective manner.
<b>CO3</b>	Demonstrate critical and innovative thinking and display competence in oral, written communication.

## **MPHPSY 203 – DISSERTATION**

<b>CO1</b>	Identify a research problem in the area of interest and apply basic research methods in Sports Psychology
<b>CO2</b>	Planning and implementation of techniques to solve their research problem.
<b>CO3</b>	Ability to gather related literature, collect, analyse data and present findings in effective scientific manner

### **PROGRAM SPECIFIC OUTCOME M PHIL SPORTS PSYCHOLOGY & SOCIOLOGY**

<b>PSO-I</b>	Research scholars will have requisite knowledge to conduct research, analyse, articulate with concrete psycho-social skills, enabling the individuals to understand their behavior and managing them for enhanced individual wellbeing.
<b>PSO-2</b>	Research Scholars will be able to adhere to professional standards and expectations, create positive changes by empowered and diversified approaches towards the promotion of health and wellness among sports personnel.

### **FIRST SEMESTER MPHSPS 101 RESEARCH METHODOLOGY AND STATISTICS**

<b>CO1</b>	Understand and apply appropriate research methods in Sports Psychology and Sociology, including research design, data analysis, and interpretation in the research work.
<b>CO2</b>	Examine and collect relevant literature and apply scientific methods and techniques in research work
<b>CO3</b>	Exhibit competency, acquire critical knowledge related to their current research, able to use critical thinking to evaluate and interpret evidence.

### **MPHSPS 102 - SPORTS PSYCHOLOGY AND SOCIOLOGY**

<b>CO1</b>	Demonstrate familiarity, and apply major concepts, theoretical perspectives, empirical findings, historical trends and the core domains of Sports Psychology and Sociology.
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<b>CO2</b>	Learn the theories, applications and principles of the core areas of their research study undertaken
<b>CO3</b>	Gain information related to their allied and supplementary areas of their research study undertaken, including methodologies adopted, assessment patterns and statistical tool.

**SECOND SEMESTER  
MPHSPS 201 - AREA OF DISSERTATION**

<b>CO1</b>	Understand and apply principles of Sports Psychology and Sociology personal, social, and organizational issues in individual and team sports.
<b>CO2</b>	Understand and apply principles of Sports Psychology and Sociology personal, social, and organizational issues in individual and team sports.
<b>CO3</b>	Have effective oral communication skills to disseminate research and scholarly activities like journal publications and conference proceedings

**MPHSPS 202 - COMPUTER OPERATIONS, COMMUNICATIONS AND  
EDUCATIONAL SKILLS**

<b>CO1</b>	Demonstrate competency and the ability to use computers and other technology to accomplish various tasks in research.
<b>CO2</b>	Apply appropriate tools to present accurate information in an effective manner
<b>CO3</b>	Demonstrate critical and innovative thinking and display competence in or written communication.

**MPHSPS 203 DISSERTATION**

<b>CO1</b>	Identify a research problem in the area of interest and apply basic research methods in Sports Psychology and Sociology.
<b>CO2</b>	Planning and implementation of techniques to solve their research problem.
<b>CO3</b>	Ability to gather related literature, collect, analyse data and present findings in effective scientific manner

**TAMILNADU PHYSICAL EDUCATION AND  
SPORTS UNIVERSITY  
CHENNAI-600 127**

**APPROVED SYLLABUS**

**(Applicable to the students admitted from the academic year  
2018-2019 onwards)**

**Choice Based Credit System**



**BSC SPORTS COACHING  
DEGREE PROGRAMME OFFERED IN THE  
DEPARTMENT OF ADVANCED SPORTS TRAINING  
AND SPORTS TECHNOLOGY  
TAMILNADU PHYSICAL EDUCATION AND  
SPORTS UNIVERSITY**

# **BSC SPORTS COACHING**

## **Programme Educational Objectives (PEO)**

- PEO-1 The students will learn the fundamental skills of specified sports for future career in Sports.
- PEO-2 The students will be exposed to train the children in Sports.

## **Educational Program Outcomes (POs):**

After completion of the program graduates will be able to

### **PROGRAMME OUTCOMES (PO'S)**

The under graduates are able to

PO-1) Attain the knowledge to train the sports person.

PO-2) Analyse the students Psychology in terms of improving the Games.

PO-3) Guide to treat and rehab the sports injuries.

PO-4) Understand the Sports movements.

PO-5) Identify the talent in basic level children to promote the welfare of Sports.

PO-6) The designed internship program will help the student to get exposure in teaching and training the fundamental skills.

PO-7) Teach and train the fundamental skill effectively.

PO-8) Motivate the students for updating the sports related knowledge

PO-9) Responsible for the healthy Society

PO-10) Imparting the knowledge for effective judgement in Sports

**PROGRAM SPECIFIC OUTCOMES (PSO)**

The under graduates are able to

PSO 1 Understanding the different components of sports training skills and its developments.

PSO-2 Intend to work with the young children for sports excellence.

<b>17102</b>	<b>ENGLISH – I BASIC LANGUAGE SKILL</b>	
	<b>COURSE OUTCOMES</b>	
	CO-1	Understand and attain knowledge on Novel.
	CO-2	Able to introduce themselves in a better way
	CO-3	Able to communicate in English with proper grammar

<b>17103</b>	<b>ANATOMY AND PHYSIOLOGY</b>
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	<b>COURSE OUTCOMES</b>	
	CO-1	Understand the structure and functions of human organs
	CO-2	Proper exercise may be prescribed for the development of the muscles and training

<b>17104</b>	<b>HISTORY ADMINISTRATION OF SPORTS/GAME</b>
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	<b>COURSE OUTCOMES</b>	
	CO-1	Understand the past events of the game and its development
	CO-2	To understand the facts performing growth and development

<b>17105</b>	<b>ALLIED THEORIES OF SPORTS AND GAMES</b>
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	<b>COURSE OUTCOMES</b>	
	CO-1	To understand the rules of the specific game to play better
	CO-2	Plan for a State level match

<b>17202</b>	<b>ENGLISH - II DEVELOPING THE LANGUAGE SKILLS</b>
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	<b>COURSE OUTCOMES</b>	
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CO-1	Communication is important for teaching and training.
CO-2	It helps for greeting the people

<b>COURSE OUTCOMES</b>	
CO-1	The knowledge of sports training principles will help to understand different qualities.
CO-2	Developing the motor qualities and skills

<b>COURSE OUTCOMES</b>	
CO-1	To understand the rules of the specific game to play better
CO-2	To prevent from injuries

<b>COURSE OUTCOMES</b>	
CO-1	To understand the rules of the specific game to play better
CO-2	Plan for a State level match

<b>COURSE OUTCOMES</b>	
CO-1	Acquire knowledge on writing the letter
CO-2	Communicate better

<b>COURSE OUTCOMES</b>	
CO-1	Plan the training for best performance
CO-2	Apply for the development of strength, speed, reaction, endurance and flexibility.

<b>COURSE OUTCOMES</b>	
CO-1	Help the sportsmen to prevent from sports injuries

CO-2	Develop the knowledge of side effects of doping
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## TECHNIQUE AND TACTICS OF SPECIFIED SPORTS/ GAMES

<b>COURSE OUTCOMES</b>	
CO-1	Help to learn skills in proper form and execute
CO-2	By learning this technique the performance could be enhanced to play competitive sport, this learning is important and it serves as basic.

<b>COURSE OUTCOMES</b>	
CO-1	To learn the other sports with support along main sport
CO-2	It help us to learn the new skill by transfer of learning method

<b>COURSE OUTCOMES</b>	
CO-1	Attain knowledge in attending the interview
CO-2	Ability to improve the personality

<b>COURSE OUTCOMES</b>	
CO-1	Understand the character and behaviour of a sport person
CO-2	The sportsmen will be Psychologically strong to play the match

<b>COURSE OUTCOMES</b>	
CO-1	To reach the top level performance it is mandatory to equip and excel the tactics.
CO-2	By developing this tactic all the fundamentals skills of the specific sports could be enhanced at the maximum level

<b>COURSE OUTCOMES</b>	
CO-1	Understand various kinds of sports injuries and its prevention
CO-2	Acquire knowledge on different protective device on sports equipments

<b>COURSE OUTCOMES</b>	
CO-1	Understand various kinds of sports movements.
CO-2	Acquire knowledge about the fundamental movements.

<b>COURSE OUTCOMES</b>	
CO-1	Gain knowledge on Anthropometry
CO-2	Improve individual personality by improving the talent

<b>COURSE OUTCOMES</b>	
CO-1	Improve individual personality
CO-2	Improve the human values and leadership qualities

<b>COURSE OUTCOMES</b>	
CO-1	To understand and learn the specific qualities recovered to improve the particular game
CO-2	Sports movement are different from sport to sport so we need to understand and choose the correct quality and to excel in the particular sports

<b>COURSE OUTCOMES</b>	
CO-1	To play any sport we need to follow certain systems and rules also insist the same
CO-2	By learning the system of play, advanced tactics could be employed to get success in a match

<b>COURSE OUTCOMES</b>	
CO-1	The knowledge of management will help to arrange systematic formation of the program
CO-2	The knowledge of sports management will help to program any sports event using effective system of management

COURSE OUTCOMES	
CO-1	This electronic device will help to design and store the data pertaining to sports performance
CO-2	By understanding the knowledge of computer and different testing methods will help the stack holders to assess the process and product.

COURSE OUTCOMES	
CO-1	Understanding the concept of coaching with stipulated principles
CO-2	Philosophical approach towards coaching will help the students to update their knowledge towards better performance.

COURSE OUTCOMES	
CO-1	Preparation for any activity is needed to execute effectively, and understanding this concept the learners will be exposed to preparation of the sportsmen for the competitions
CO-2	The success of any program purely depends on the preparations, which will help to reach the goal.

COURSE OUTCOMES	
CO-1	Evaluation plays vital role in success of any program, this approach towards the competition is scientific one.
CO-2	Understanding the importance of assessment thereby enhancing the performance by redesigning

## SPECIFIED SPORTS PRACTICAL II, IV AND VI SEMESTER

- The Candidate has to select any one of the Major Games as Specified Sports practical during II, IV and VI semester

Semester	Games	Marks – Max - 100		
		Internal	External	Total
II Semester	Handball, Football, Swimming, Volleyball, Fencing, Taekwondo	100	-	100
IV Semester	Handball, Football, Swimming, Volleyball, Fencing, Taekwondo	100	-	100
VI Semester	Handball, Football, Swimming, Volleyball, Fencing, Taekwondo	25	75	100

## ANCILLARY PRACTICAL: PART – I, II, III & IV

The candidate has to select any one of the following games as ancillary practical

during I, II and IV semester. During III Semester the candidate has to select Track and Field Compulsory

<b>Sport III Semester</b>	<b>Games I, II and IV Semester</b>	<b>Max Marks 100 (Internal Marks)</b>	<b>Minimum pass Marks</b>
<b>Track and Field</b>	<b>Badminton, Ball Badminton, Basketball, Handball, Hockey, Kabaddi, Football, Kho-kho, Tennis, Swimming, Table Tennis, Volleyball and Weight Lifting</b>	<b>100</b>	<b>50</b>

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**Choice Based Credit System**

**M.TECH SPORTS TECHNOLOGY  
DEGREE PROGRAMME OFFERED IN THE  
DEPARTMENT OF ADVANCED SPORTS TRAINING  
AND SPORTS TECHNOLOGY  
TAMILNADU PHYSICAL EDUCATION AND  
SPORTS UNIVERSITY**

# M.TECH SPORTS TECHNOLOGY

## Programme Educational Objectives (PEO)

- PEO-1 Graduate will have successful academic and research career.
- PEO-2 Graduates will have employment in public and private sectors and resolve economic, social and environmental issues.

## Educational Program Outcomes (POs):

After completion of the program graduates will be able to

### PROGRAMME OUTCOMES (PO'S)

The post graduates are able to

PO-1) Attain in-depth knowledge to solve Sports Engineering problems in current needs of stack holders at global perspective.

PO-2) Analyse complex Sports Engineering problems critically.

PO-3) Find optimal solutions for Sports Engineering and Technology problems considering social and environmental issues.

PO-4) Carryout researches in one or more domains of Sports Engineering and Technology

PO-5) Apply appropriate and upgraded tools like DARTFISH,CFD to solve present day Sports Engineering and Technology problems.

PO-6) Carryout projects & research using collaborative and multidisciplinary engineering to enhance sporting performance considering economic aspects.

PO-7) Communicate effectively socio-economic problems related to Sports Engineering and technology by appropriate documentations and presentations.

PO-8) Incline for independent life-long learning.

PO-9) Exhibit social responsibility adhering to ethical values.

PO-10) Make corrective measures based on their own experiences.

**CURRICULUM 2018-CHOICE BASED CREDIT SYSTEM**

**M.TECH SPORTS TECHNOLOGY**

<b>PST 18 CT101</b>	<b>AERODYNAMICS IN SPORTS</b>		
	<i>Instruction : 4 hr / week</i>	<i>Credits : 4</i>	<i>Assessment : 25 + 75</i>

<b>COURSE OUTCOMES</b>	
CO-1	Understand and attain knowledge on Theory and Experimental knowledge of aerodynamics in sports
CO-2	Apply Theory and Experimental knowledge of aerodynamics in sports
CO-3	Design the high performance equipments and to optimize the performance of the athlete.

<b>COURSE OUTCOMES</b>	
CO-1	Understand various kinds of materials and its properties
CO-2	Apply specific materials for the design and manufacture of the different sports apparel and equipments
CO-3	Modify suitable materials/ design to increase athlete performance and to avoid the injury.

**PST18CT103 - Research Methodology and IPR  
Course Objectives:**

<b>COURSE OUTCOMES</b>	
CO-1	Understand research problem formulation
CO-2	Analyze research related information
CO-3	Follow research ethics

	CO4	Understand that today's world is controlled by Computer, Information Technology, but tomorrow world will be ruled by ideas, concept, and creativity.
	CO5	Understanding that when IPR would take such important place in growth of individuals & nation, it is needless to emphasis the need of information about Intellectual Property Right to be promoted among students in general & engineering in particular.
	CO6	Understand that IPR protection provides an incentive to inventors for further research work and investment in R & D, which leads to creation of new and better products, and in turn brings about, economic growth and social benefits.

### **PST18CL101 Sports Aerodynamics Lab**

#### **LIST OF EXPERIMENTS**

Study on wind tunnel basis and low speed sub sonic wind tunnel

Finding Drag and lift coefficient of different sports balls using wind tunnel Test

Comparing drag coefficient various sports balls

Calculating side force and pressure distribution on various balls

	<b>COURSE OUTCOMES</b>	
	CO-1	Understand the influence of air on various sports.
	CO-2	Develop specific models for testing the effect of air
	CO-3	Modify the position of the models to increase athlete performance

#### **Course Objectives:**

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

	<b>COURSE OUTCOMES</b>	
	CO-1	Understand various kinds of software used for modelling and design of sports equipments.
	CO-2	Apply specific softwares for modelling different sports equipments

<b>COURSE OUTCOMES</b>	
CO-1	Understand the concepts of biomechanics in sports
CO-2	Modify suitable body positions and movements to increase athlete performance and to avoid injury.
CO-3	Optimize the performance and safety of athletes using the principles of biomechanics.

<b>COURSE OUTCOMES</b>	
CO-1	Gain knowledge of the electronics and sensor technology
CO-2	Measure performance of the athlete error free
CO-3	increase athlete performance and to avoid injury by providing with feed to the players/athletes

#### **PST18MP201 MINI PROJECT**

<b>COURSE OUTCOMES</b>	
CO-1	Work in actual industrial environment if they opt for internship.
CO-2	Solve a live problem using software/analytical/computational tools.
CO-3	Write technical reports.
CO-4	Present and defend their work in front of technically qualified audience.

#### **PST18CL201 Sports Performance Analysis Lab**

**Course Objectives:**

- To apply movement analysis through image capturing through high resolution camera and motion analysis software to evaluate and optimize the sports performance.

- **LIST OF EXPERIMENTS**

**Studies on Motion analysis software, Individual player analysis , match analysis, vertical jumping test, drag flick analysis using stromotion, ball trajectory analysis using stromotion , basketball tagging analysis.**

<b>COURSE OUTCOMES</b>	
CO-1	Acquire knowledge on Athletes movement capturing using high resolution camera Movement analysis software
CO-2	Capture and analyse movements in various sports and athletic events

CO-3	Optimize players performance
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### PST18CL202 COMPUTER AIDED MODELING & ANALYSIS LAB

#### Course Objectives:

- 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.
- **LIST OF EXPERIMENTS**

Numerical analysis of different sports balls, Numerical analysis of stadium, FEM analysis on 2D pole vault Race engine modelling and analysis

COURSE OUTCOMES	
CO-1	Classify a given problem on the basis of its dimensionality as 1-D, 2-D, or 3-D, time-dependence as Static or Dynamic, Linear or Non-linear.
CO-2	Develop system level matrix equations from a given mathematical model of a problem following the Galerkin weighted residual method or principle of stationary potential.
CO-3	While demonstrating the process mentioned in 2 above, he will be able to identify the primary and secondary variables of the problem and choose correct nodal degrees of freedom and develop suitable shape functions for an element, implement Gauss-Legendre scheme of numerical integration to evaluate integrals at element level, and assemble the element level equations to get the system level matrix equations. He will also be able to substitute the essential boundary conditions correctly and obtain the solution to system level matrix equations to get the values of the field variable at the global nodes.
CO-4	state three sources of errors in implementing FEM and suggest remedies to minimize the same for a given problem, viz. Modeling errors, Approximation errors, and numerical errors.
CO-5	Obtain consistent and lumped mass matrices for axial vibration of bar and transverse vibration of beams and obtain fundamental frequency of natural vibration using the methods mentioned in the curricula.
CO-6	use MATLAB for implementation of FEM to obtain elongations at nodes of a bar subjected to traction and concentrated loads and prescribed boundary conditions
CO-7	use commercial software like ANSYS or ABAQUS for implementation of FEM to obtain stress concentration due to a small hole in a rectangular plate subjected to traction on edges and concentrated loads at points on the edges and prescribed boundary conditions and present his/her work using the above software in a conference or publish the work in a peer reviewed journal

### Dissertation Phase-1

	COURSE OUTCOMES
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	CO-1	Exposed to self-learning various topics.
	CO-2	Survey the literature such as books, national /international refereed journals and contact resource persons for the selected topic of research.
	CO-3	Write technical reports.
	CO-4	Develop oral and written communication skills to present and defend their work in front of technically qualified audience.

## Dissertation Phase- II

	<b>COURSE OUTCOMES</b>	
	CO-1	Prepare comprehensive report based on literature survey and Use different experimental techniques
	CO-2	Use different software/ computational/analytical tools.
	CO-3	Design and develop an experimental set up/ equipment/test rig relevant to sports technology
	CO-4	Conduct tests on existing set ups/equipments and draw logical conclusions from the results after analyzing them.
	CO-5	Either work in a research environment or in an industrial environment.
	CO-6	Conversant with technical report writing.
	CO-7	Present and convince their topic of study to the engineering community or to publish the work in a peer reviewed journal/conference.

	<b>COURSE OUTCOMES</b>	
	CO-1	Understand concepts of statistics in the different sports to predict the success and maximum chance of winning technique. various kinds of materials and its properties
	CO-2	Apply statistical techniques in different sports to predict the success and maximum chance of winning.
	CO-3	Optimize the results

### Course Objectives:

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

	<b>COURSE OUTCOMES</b>	
CO-1	Attain knowledge in anatomy and biological science.	
CO-2	Understand about training and the influence of environment on training	
CO-3	study and measure the effect of nutritional on optimal performance of the athlete	

### **ST 1503 RACE ENGINE DESIGN FOR OPTIMAL PERFORMANCE**

**Course Objectives:**

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

	<b>COURSE OUTCOMES</b>	
CO-1	Understand various kinds terminology in race engine	
CO-2	Acquire knowledge on race car design	
CO-3	Modify suitable design to increase performance and to avoid the injury.	

### **ST 1504 SPORTS EQUIPMENT MATERIALS**

**Course Outcomes:**

- To apply different engineering materials in the manufacturing of the sports equipments

	<b>COURSE OUTCOMES</b>	
CO-1	Gain in-depth knowledge on various kinds of materials and its properties	
CO-2	Apply specific materials for manufacturing different sports goods and equipments	
CO-3	Refer suitable materials to design and improve athlete performance and to avoid injury.	

### **T 1505 SPORTS TRAUMATOLOGY**

	<b>COURSE OUTCOMES</b>	
CO-1	Understand various kinds of sports injuries and its prevention	
CO-2	Acquire knowledge on different protective device on sports equipments	

### **ST1506 - SOFTWARE IN SPORTS**

**Course Objectives:**

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

<b>COURSE OUTCOMES</b>	
CO-1	Understand various kinds of software used in sports
CO-2	Apply suitable software for analysis and prediction of athletes performance and for error free decision making in sports and games.
CO-3	Carryout project works

### **ST 1507 SPORTS PSYCHOLOGY: ISSUES AND APPLICATIONS**

<b>COURSE OUTCOMES</b>	
CO-1	Gain knowledge on <ul style="list-style-type: none"> <li>• Psychology on economy issues</li> <li>• Psychology on environmental issues</li> <li>• Ethical and mental health</li> </ul>
CO-2	Improve individual personality

### **ST 1508 SURVEYING AND CONSTRUCTION MATERIALS**

**Course Objectives:**

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

<b>COURSE OUTCOMES</b>	
CO-1	Understand the significance of various kinds of tools used for development of sports facility and infrastructure
CO-2	Apply various tools for development of different sports facility and infrastructure
CO-3	Gain knowledge on construction materials to increase athlete performance and to avoid the injury.

**Course Outcomes:**

- Able to apply knowledge in the application of different biomaterial implantation for athlete in the sports medicine.

<b>COURSE OUTCOMES</b>	
CO-1	Understand the significance of various kinds implant of materials and its properties
CO-2	Apply specific implant materials for defective human parts
CO-3	Gain knowledge on biocompatibility

**Course Objectives:**

- To develop the entrepreneurship and management skill in the sport industry and private and public sector organisation.

COURSE OUTCOMES	
CO-1	Understand various issues in commercialising sports
CO-2	Gain significant knowledge about the role of television and sports sponsorers on commercialising sports
CO-3	The ethical issues pertaining to commercialisation of sports

**Course Objectives:**

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

COURSE OUTCOMES	
CO-1	Gain significant knowledge on <ul style="list-style-type: none"> <li>• Market trends and Opportunity,</li> <li>• labour relation,</li> <li>• taxation and legal issue on sports industry.</li> </ul>
CO-2	Apply SPSS tool to predict and analyse sports industry .

**ST1512 MOTOR SPORTS APPLICATIONS**

**Course Objectives:**

To impart knowledge about racing vehicle behavior and various technologies used in motorsports.

COURSE OUTCOMES	
CO-1	Understand the fundamentals of racing vehicle characteristics.
CO-2	. Understand aerodynamic requirements in racing vehicles
CO-3	Understand the concepts of chassis behavior of racing vehicles.
CO-4	Gain knowledge about the concepts of suspension characteristics of racing vehicles.
CO-5	Understand the problems faced in drives and braking systems in motorsports

COURSE OUTCOMES	
CO-1	Understand various kinds of materials and its properties

	CO-2	Apply specific materials for the design and manufacture of the different sports apparel and equipments
	CO-3	Modify suitable materials/ design to increase athlete performance and to avoid the injury.

**Course Objectives:**

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

	<b>COURSE OUTCOMES</b>	
	CO-1	Acquire the knowledge of basic statistics concepts and planning aspects
	CO-2	Apply TQM in athletic performance
	CO-3	Derive mathematical model for different sports activities and assess the reliability of the modeled sports activities
	CO-4	Apply the knowledge of reliability and planning concepts to the practical and real time systems.

	<b>COURSE OUTCOMES</b>	
	CO-1	Understand the concepts of cell and tissue and its properties
	CO-2	Gain significant knowledge on cell communication and culture

**ST 1516 SPORTS MATERIAL ENGINEERING -II**

**Course Objectives:**

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

	<b>COURSE OUTCOMES</b>	
	CO-1	Understand various kinds of materials and its properties
	CO-2	Gain specific materials knowledge for manufacture of the different sports apparel and equipments
	CO-3	Apply suitable materials to increase athlete performance and to avoid th injury during sporting activities.

**ST 1517 RACE CAR VEHICLE DYNAMICS**

**Course Objectives:**

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

COURSE OUTCOMES	
CO-1	Exhibit the knowledge in <ul style="list-style-type: none"> <li>• Tire behaviour</li> <li>• Transient stability</li> <li>• Steady state pair analysis</li> </ul>
CO-2	Apply the concept learned to design and testing of a race car
CO-3	Modify suitable design changes to increase athlete performance and to avoid injury.

### ST 1518 SPORTS FACILITY MANAGEMENT

#### Course Objectives:

- To understand facility management and to impart knowledge on effective utilization sports facilities while conducting different sports activities.

CO-1	Learn about <ul style="list-style-type: none"> <li>• Concepts of facility management</li> <li>• facility planning</li> <li>• facility marketing</li> <li>• Facility Preparation</li> </ul>
CO-2	Apply the different sports facility management techniques to organize various sports activities effectively
CO-3	Analysis sports performance through facility management

### ST 1519 SPORTS MARKETING

#### Course Objectives:

- To impart knowledge on marketing and to study about various sports marketing techniques and opportunities

COURSE OUTCOMES	
CO-1	Demonstrate knowledge in: <ul style="list-style-type: none"> <li>• Concepts in sports Marketing</li> <li>• sports consumer behaviour</li> <li>• Pricing strategies</li> <li>• Places/Product distribution</li> </ul>
CO-2	Apply sports marketing techniques to market various sports goods
CO-3	Analyse different sports marketing techniques and to implement in the real sports marketing environment

### ST 1520 SOIL AND GROUND IMPROVEMENT TECHNIQUES

#### Course Objectives:

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

COURSE OUTCOMES	
CO-1	Understand various kinds of soils and ground improvement technique and its properties
CO-2	Aware of the different sports surface engineering technique for the good performance of the athlete and to avoid sports injury.
CO-3	Apply ground improvement techniques to improve players performance

### SET 1501 - FUNDAMENTALS OF SPORTS TECHNOLOGY

#### Course Objectives:

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

Appreciate the different technological advances available for application in sports domain.

COURSE OUTCOMES	
CO-1	Acquire knowledge on <ul style="list-style-type: none"> <li>• Sports Science and Sports Engineering</li> <li>• Applications of Engineering in Sports</li> </ul>
CO-2	Understand engineering concepts and techniques used in different sports .
CO-3	Understand business opportunities in sports engineering.

### SET 1502 INTELLECTUAL PROPERTIES RIGHTS

COURSE OUTCOMES	
CO1	Understand that today's world is controlled by Computer, Information Technology, but tomorrow world will be ruled by ideas, concept, and creativity.
CO2	Understanding that when IPR would take such important place in growth of individuals & nation, it is needless to emphasis the need of information about Intellectual Property Right to be promoted among students in general & engineering in particular.
CO3	Understand that IPR protection provides an incentive to inventors for further research work and investment in R & D, which leads to creation of new and better products, and in turn brings about, economic growth and social benefits.

### SET 1503 - DESIGN OF EXPERIMENTS AND RESEARCH APPLICATIONS

#### Course Objectives:

- To impart knowledge about Design of Experiments, Taguchi's Methods and Robust Design.

COURSE OUTCOMES	
CO-1	Acquire knowledge on <ul style="list-style-type: none"> <li>• Design of Experiments</li> <li>• Taguchi's Methods and</li> <li>• Robust Design techniques.</li> </ul>
CO-2	Understand Design of Experiments, Taguchi's Methods and Robust Design techniques in research
CO-3	Apply Design of Experiments, Taguchi's Methods and Robust Design techniques in research

### SET 1504 - INDUSTRIAL SAFETY

**Lecture: - 3 h/week**

**Course objectives:**

- To aware of the safety procedure during accident and the maintenance of the machinery and the production sit to avoid the accident.

COURSE OUTCOMES	
CO-1	Acquire knowledge on <ul style="list-style-type: none"> <li>• Industrial safety</li> <li>• Maintenance engineering</li> </ul>
CO-2	Apply safety and the maintenance to avoid the accident and injury.
CO-3	Plant efficiency improved

### AE01: ENGLISH FOR RESEARCH PAPER WRITING

**Course objectives:**

1. Understand that how to improve your writing skills and level of readability
2. Learn about what to write in each section
3. Understand the skills needed when writing a Title
4. Ensure the good quality of paper at very first-time submission

COURSE OUTCOMES	
CO-1	Improve your writing skills and level of readability
CO-2	Understand what to write in each section
CO-3	Submit good quality of paper at very first-time

### AE02: DISASTER MANAGEMENT

**Course Objectives:**

1. learn to demonstrate a critical understanding of key concepts in disaster risk reduction and

humanitarian response.

2. critically evaluate disaster risk reduction and humanitarian response policy and practice from multiple perspectives.

3. develop an understanding of standards of humanitarian response and practical relevance in specific types of disasters and conflict situations.

4. critically understand the strengths and weaknesses of disaster management approaches, planning and programming in different countries, particularly their home country or the countries they work in.

COURSE OUTCOMES	
CO-1	Understand key concepts in disaster risk reduction and humanitarian response.
CO-2	Evaluate disaster risk reduction and humanitarian response policy and practice from multiple perspectives.
CO-3	Understand the strengths and weaknesses of disaster management approaches.

### AE03 SANSKRIT FOR TECHNICAL KNOWLEDGE

#### Course Objectives :

1. To get a working knowledge in illustrious Sanskrit, the scientific language in the world

2. Learning of Sanskrit to improve brain functioning

3. Learning of Sanskrit to develop the logic in mathematics, science & other subjects enhancing the memory power

4. The engineering scholars equipped with Sanskrit will be able to explore the huge knowledge from ancient literature

COURSE OUTCOMES	
CO-1	Understanding basic Sanskrit language
CO-2	Ancient Sanskrit literature about science & technology can be understood
CO-3	Being a logical language will help to develop logic in students

### AE04: VALUE EDUCATION

#### Course Objectives

1. Understand value of education and self- development

2. Imbibe good values in students

3. Let the should know about the importance of character.

COURSE OUTCOMES:	
CO-1	Knowledge of self-development
CO-2	Learn the importance of Human values
CO-3	Developing the overall personality

### AE05: CONSTITUTION OF INDIA

#### Course Objectives:

1. Understand the premises informing the twin themes of liberty and freedom from a civil rights perspective.
2. To address the growth of Indian opinion regarding modern Indian intellectuals' constitutional role and entitlement to civil and economic rights as well as the emergence of nationhood in the early years of Indian nationalism.
3. To address the role of socialism in India after the commencement of the Bolshevik Revolution in 1917 and its impact on the initial drafting of the Indian Constitution.

COURSE OUTCOMES:	
CO-1	Acquire knowledge about <ul style="list-style-type: none"><li>• fundamental of Indian constitution</li><li>• Constitutional Rights &amp; Duties:</li></ul>
CO-2	Understand civil and economic rights and social justice in India
CO-3	Acquire knowledge about <ul style="list-style-type: none"><li>• Local Administration</li><li>• Election commission</li></ul>

### AE06: PEDAGOGY STUDIES

#### Course Objectives:

Students will be able to:

1. Review existing evidence on the review topic to inform programme design and policy making undertaken by the Dfid, other agencies and researchers.
2. Identify critical evidence gaps to guide the development.

COURSE OUTCOMES:	
CO-1	What pedagogical practices are being used by teachers in formal and informal classrooms in developing countries?
CO-2	What is the evidence on the effectiveness of these pedagogical practices, in what conditions, and with what population of learners?
CO-3	How can teacher education (curriculum and practicum) and the school curriculum and guidance materials best support effective pedagogy?

### AE07: STRESS MANAGEMENT BY YOGA

#### Course Objectives:

1. To achieve overall health of body and mind
2. To overcome stress

COURSE OUTCOMES:	
CO-1	Develop healthy mind in a healthy body thus improving social health also.
CO-2	Improve efficiency.

### AE08 PERSONALITY DEVELOPMENT THROUGH LIFE ENLIGHTENMENT SKILLS

#### Course Objectives:

1. To learn to achieve the highest goal happily
2. To become a person with stable mind, pleasing personality and determination

3. To awaken wisdom in students

<b>COURSE OUTCOMES:</b>	
CO-1	Study of Shrimad-Bhagwad-Geeta will help the student in developing his personality and achieve the highest goal in life .
CO-2	The person who has studied Geeta will lead the nation and mankind to peace and prosperity .
CO-3	Study of Neetishatakam will help in developing versatile personality of students.

**AE09: PROFESSIONAL ETHICS IN ENGINEERING**

<b>COURSE OUTCOMES:</b>	
CO-1	The students will understand the basic perception of profession, professional ethics, various moral & social issues, industrial standards, code of ethics and role of professional ethics in engineering field.
CO-2	The students will aware of professional rights and responsibilities of an engineer, responsibilities of an engineer for safety and risk benefit analysis.
CO-3	The students will acquire knowledge about various roles of engineers in variety of global issues and able to apply ethical principles to resolve situations that arise in their professional lives.