

School of Physical education and Sports Sciences
SCHEME AND SYLLABUS OF MPHIL IN PHYSICAL EDUCATION
 with effect from 2019-20 academic session

SCHEME AND EVALUTION OF MPHIL COURSE

Semester 1	Courses	Marks			Credit
		CE	ESE	Total	
	1. Research Methodology	40	60	100	4
	2. Advances in Sports Science research Part A – Science of Sports Training (2 Credits) Part B – Elective any one: (2 credits) 1. Exercise Physiology 2. Sports Biomechanics 3. Sports Psychology 4. Sports Nutrition	40	60	100	4
Semester 2	1. Dissertation*		160	160	6
	2. Course viva-voce		40	40	2
		80	320	400	16

For dissertation, average of marks given by external examiner and supervising teacher

Syllabus for Course Work – PhD in Physical Education

PAPER 1: RESEARCH METHDOLOGY

Unit 1: Concept of Research

- 1.1 Meaning, Definition, Scope of Research in Physical Education & Sports
- 1.2 Aim, Ethics and Characteristics of Research
- 1.3 Types of Research
- 1.4 Selection and formulation of Research Problem – Research Design

Unit 2: Research Methods

- 2.1 Quantitative & Qualitative Research
- 2.2 Techniques for Qualitative and Quantitative Research Problems - Hypothesis Testing
- 2.3 Process of Literature survey and review – Writing reviewed literature
- 2.4 Critical review/evaluation of Dissertations/Research articles

Unit 3: Research Data, Analysis & Interpretation

- 3.1 Parametric & non-parametric data
- 3.2 Data collection tools & Data analysis using statistical software
- 3.3 Descriptive and Inferential Statistical tools
- 3.4 Interpretation of data & deriving conclusions

Unit 4: Technical Writing

- 3.1 Research Proposal, Research Report, Dissertation/Thesis
- 3.2 Citation, Notes, Reference, Bibliography, and Webliography
- 3.3 Common Errors in Writing Research Report, Copyright issues and Plagiarism, IPR
- 3.4 Ethics in Research and Publication. Citation and Acknowledgement. Publication – citation index, impact factor

Unit 5: Practical work/field work related to research

Paper 2

ADVANCES IN SPORTS SCIENCE RESEARCH

The course consists two part: Part A and Part B with equal marks. Part A is common to all students, and Part B is elective based on the specialised area of research of the candidate

Part A: Science of Sports Training

Unit 1: Introduction and Trends in Sports Training

1.1 Meaning, Definition, Scope of Sports Training

1.2 Aim and Characteristics of Sports Training

1.3 Trends in Sports Training

1.4 Talent Identification

Unit 2: Training Methods & Training Programme

2.1 Principles of Sports Training

2.2 Load, Adaptation, and Recovery

2.3 Periodization - Long Term and Short Term Training Plans

2.4 Designing Training Program, Evaluation of Training Program

Part B (Electives)

Select any one:

- 1. Exercise Physiology**
- 2. Sports Psychology**
- 3. Sports Biomechanics**
- 4. Sports Nutrition**

1. Exercise Physiology

Unit 1: Introduction

- 1.1 Concept and Latest trends in Exercise Physiology
- 1.2 Effect of Exercise on Different Systems.
- 1.3 Energy System - Hormonal Regulation of Exercise, Muscular and Neurological Control Of Movement
- 1.4 Cardiovascular Control and Respiratory Regulation during Exercise
- 1.5 Environmental Influences Optimizing Performance in Sport

Unit 2 Research review, Practical and Field work

- 2.1 Research Reviews (Minimum Eight) Related to
 - (a) Effect of Different Training Program on Different Systems.
 - (b) Effect of Altitude Training on Performance
 - (c) Effect of Environmental Training on Performance
 - (d) Effect of ergogenic aids on different systems
- 2.2 Course Related Practical Work, Field Work

2. Sports Biomechanics

Unit 1: Introduction and Trends in Biomechanics

- 1.1 Meaning, Definition, Scope of Biomechanics
- 1.2 Importance of latest trends in Biomechanics
- 1.3 Analysis of Techniques and Training - Analysis of fundamental Skills and Sports Skills
- 1.4 Video Film Analysis - Cinematography and Videography

Unit 4 : Research review, Practical and Field work

- 2.1 Research Reviews (Minimum Eight) Related to
 - (a) Analysis of Techniques and Skills
 - (b) Analyzing Methods in Sports
 - (c) Sports Equipment and Surfaces
 - (d) Videographic analysis in sports
- 2.2 : Course Related Practical Work, Field Work

3. Sports Psychology

Unit 1: Introduction

1.1 Meaning, scope & development of sport psychology

1.2 Personality traits of Sportsmen - Psychological Profiling of Sportsmen/Athletes

1.3 Anxiety – Types, Effect of Anxiety on performance - Techniques for Relaxation & Activation

1.4 Motivation – Types & Techniques of motivation

Unit 2: Research review, Practical & Field Work

2.1 Research Reviews (Minimum Eight) Related to

(a) Psychological Profile of Sportsman

(b) Anxiety and Motivation

(c) Growth and Development

(e) Learning

2.2 : Course Related Practical Work, Field Work

4. Sports Nutrition

Unit 1: Introduction

Unit 1: Introduction

1.1 Concept, Importance & Scope of Sports Nutrition

1.2 Content of sports nutrition - Trends in Sports Nutrition

1.3 Water, exercise & dehydration

1.4 Diet prescription & ergogenic aids - Sports supplement

Unit 2 : Research review, Practical & Field Work

2.1 Research Reviews (Minimum Eight) Related to

(a) Proportion of diet content

(b) Sports supplement

(c) Intake & energy expenditure

(d) Ergogenic aids

2.2 Course Related Practical Work, Field Work