BHAGWANT UNIVERSITY Sikar Road, Ajmer Rajasthan



Syllabus

Institute of Humanities & Social Sciences

M. Phil I Semester

Physical Education

Course Category

MPEd: M.Phil in Physical Education

CCC: Compulsory Core Course ECC: Elective Core Course

Contact Hours:

L: Lecture T: Tutorial

P: Practical or Other **Marks Distribution :**

IA: Internal Assessment (Test/Classroom

Participation/Quiz/Presentation/Assignment etc.)

EoSE: End of Semester Examination

M. Phil (Physical Education)

(Course Structure)

Subject code	Subject Name	Teaching hours			Marks			
		L	T	P	External	Internal	Total	
01MPEd101	Research Methodology :Theory & Techniques	3	0	0	70	30	100	
01MPEd102	Training Methods -I	3	0	0	70	30	100	
01MPEd103	Training	3	0	0	70	30	100	

	Methods -II						
01MPEd104	Measurement and Evaluation in Physical Education	3	0	0	100		100
Total		12	0	0	280	120	400

SEMESTER II

Subject	Subject Name	Teaching		ing	Marks			
code		hours		rs				
		L	T	P	External	Internal	Total	
02MPEd101	Advanced Research Methodology	3	0	0	70	30	100	
02MPEd102	HISTORY & PRINCIPLES OF PHYSICAL EDUCATION	3	0	0	70	30	100	
02MPEd103	SPORTS TRAINING & BIOMECHANICS IN PHYSICAL EDUCATION	3	0	0	70	30	100	
02MPEd201	DISSERTATION	3	0	0	50	50	100	
	Total	12	0	0	260	140	400	

Research Methodology Theory And Techniques

Course/Paper: O1MPEd101

Unit - 01

Research - definition - importance and meaning of research - characteristics of research - types of research - steps in research - identification, selection and formulation of research problem - research questions - research design -

formulation of hypothesis - review of literature

Unit - 02

Sampling techniques: sampling theory - types of sampling - steps in sampling sampling and non-sampling error - sample size - advantages and limitations of sampling. Collection of data: primary data - meaning - data collection methods -

secondary data - meaning - relevances, limitations and cautions.

Unit - 03

Statistics in research - measure of central tendency - dispersion - skewness and kurtosis in research. Hypothesis - fundamentals of hypothesis testing - standard error - point and interval estimates - important non-parametric tests : sign, run,

kruskal - wallis tests and mann-whitney test.

Unit - 04

Para metric tests: testing of significance - mean, proportion, variance and correlation - testing for significance of difference between means, proportions, variances and correlation co-efficient. Chi-square tests - anova - one-way and twoway.

Unit - 05

Research report: types of reports - contents - styles of reporting - steps in drafting

reports - editing the final draft - evaluating the final draft.

Training Methods – I

Course/Paper: 01MPEd102

Unit - 01

Types of training - weight training - circuit training - fartlek training - over distance and under distance - pressure training. Basic concept of physical fitness - basic principles in training - basic physical characteristics - fitness and training emotional fitness and psychological training.

Unit - 02

Strength - maximum strength elastic strength - strength insurance - absolute and relative strength - external resistance and athletic ability to express force..

Unit - 03-

tatic muscular activity - dynamic muscular activity - eccentric muscular activity - isokinetic muscular activity - strength relative as movement - development of strength - strength development training.

Unit – 04-

Speed in sports, speed development - training for speed development - the speed barrier - endurance and speed training. Training methods - duration - repetition - competition and testing - endurance sports.

Unit - 05-

Mobility classification - factors influencing mobility - role of mobility - mobility training - mobility unit construction - mobility derivates.

Strength, speed, endurance and ability - vital capacity - apparatus - spirometer - spigmamano meter; grip dynamometers, leg dynamometer, instra pulse apparatus and biomonitor

<u>Training Methods – II</u>

Course/Paper: 01MPEd103

Unit - 01

Aeorobic muscle metabolism - anaerobic muscle metabolism - the cardiorespiratory system - cardio respiratory - response to exercise. Aerobic training, effects on heart rate and heart size, blood pressure, blood distribution, blood, lungs, maximal oxygen uptake - lactic acid.

Unit - 02

Anaerobic power and power and speed, anaerobic capacity, anaerobic glycolysis - anaerobic steriods.

Growth and development - physical growth effects - height, weight, chest width - physiological effects - heart rate response, oxygen consumption responses and other combined responses - reaction and movement time.

Unit - 03

Physiological changes accompanying the aging process.

A.muscle size and strength

B.fat, lean body weight and bascal metabolic rate.

C.respiratory system

D.cardiovascular system

E.nervous system. Training adaption in the aged . Basic principles and guidelines for constructing cardio respiratory

Endurance exercise programme for the aged.

Unit - 04

Carbohydrate, fat, protein, minerals, vitamins, etc. Pre game meal - sleep - rest, muscle tone and readiness.

Unit - 05

Effect of drugs - alcohol - coffine - smoking on performance — blood doping - anabolic steroid - drug abuse in athletes. Effect of climate changes and high attitude on human performance.

Measurement and Evaluation in Physical Education

Course/Paper: 01MPEd104

UNIT I: Meaning of the term Test, measurement, Evaluation and Assessment Use of the term Test, measurement, Evaluation and Assessment in Research

UNIT II

Introduction the different test: Knowledge, Psychological, Fitness, Skill, Physiological, Special Population, Test batteries, Anthropometric test Trends in Evaluation in Physical Education

UNIT III:

Construction of Data collection tools .Questionnaire and Opinionnaire .Fitness and Skill test Rating Scale

UNIT IV:

Testing Validity and Reliability of testing tools Different methods for testing validity of tool Different methods for testing reliability of tool Norms- Types, Importance and construction

UNIT V:

Factors affecting measurement in physical education .Characteristics of Test batteries .Factors to be Considered for selecting test .Factors to be considered for administration of test. Written, Motor test .

SEMESTER II

PAPER I

ADVANCED RESEARCH METHODOLOGY 02MPHY101

UNIT - I

Research: Definition, Importance and Meaning of research, Characteristics of research, Types of Research, Steps in research, Identification, Selection and formulation of research problem, Research questions – Research design – Formulation of Hypo Dissertation, Review of Literature.

UNIT - II

Sampling techniques: Sampling theory, types of sampling – Steps in sampling – Sampling and Non-sampling error – Sample size – Advantages and limitations of sampling.

Collection of Data: Primary Data – Meaning – Data Collection methods – Secondary data – Meaning – Relevances, limitations and cautions.

UNIT – III

Statistics in Research – Measure of Central tendency, Dispersion, Skewness and Kurtosis in research, Hypo Dissertation, Fundamentals of Hypo Dissertation testing, Standard Error, Point and Interval estimates, Important Non-Parametric tests: Sign, Run, Kruskal, Wallis tests and Mann, Whitney test.

UNIT - IV

Para metric tests: Testing of significance, mean, Proportion, Variance and Correlation, testing for Significance of difference between means, proportions, variances and correlation co-efficient. Chi-square tests, ANOVA, One-way and Two-way.

UNIT- V

Research Report: Types of reports, contents, styles of reporting, Steps in drafting reports, editing the final draft, evaluating the final draft.

Reference Books:

- 1. Statistical Methods S.P. Gupta
- 2. Research Methodology Methods and Techniques C.R. Kothari
- 3. Statistics (Theory and Practice) B.N. Gupta
- 4. Research Methodology Methods and Statistical Techniques Santosh Gupta

PAPER-II

HISTORY & PRINCIPLES OF PHYSICAL EDUCATION 02MPHY102 UNIT I

Definition, Meaning & scope of Physical Education, Aims & objectives of Physical Education, Relationship of Physical Education & Recreation,. Contribution of physical Education towards general education

UNIT II

History of physical Education in ancient Greek, comparative study of Spartan Athenian education. The origin and development of Olympic Games. Development of Asian Games.

UNIT III

Physical Education in Germany, Sweden & Denmark (Emphasis only on contribution of based, Guts Moths, john spies, machtegall, ling). Present status of Physical Education & Recreation in Russia and Japan. History of physical education in India (Pre& Post independence Era).

UNIT IV

Critical appreciation of the following:, State Sports departments, I.OC. policies for developing Education & Sports, Compulsory programmed of physical education & sports for school Modern Olympics, Sports Authority of India, South Asian Federation Games

UNIT V

Foundation of physical education, Biological ativitity, its need, principle of use and dis-use Growth and development, Age & Sex difference, Qualification of physique.

Reference Books:

- 1. Charles & Bucher: Foundations of Physical Education
- 2. Harold m. Barrow: Man &His movement principles of phy. Education.
- **3.** J.F. Williams: principles of physical education.
- **4.** Cowl &France: philosophy and principles of physical education.
- **5.** D.G. wakharkar: Mannual of physical education.
- 6. M.L.Kamlesh &M.S. Sangral :physical education
- 7. Upadyke Johnson: principles of modern physical education health & recreation.

PAPER-III

SPORTS TRAINING & BIOMECHANICS IN PHYSICAL EDUCATION UNIT I

Introduction to Sports Training

- 1. Meaning and definition of sports Training and Coaching
- 2. Aims and Tasks of sports Training
- 3. Characteristics of sports Training
- **4.** Training Load and its Factors Quality of movements, Type of Exercises, Load Volume and Load Intensity.
- **5.** Loading and Adoption Process.
- **6.** Forms of adaptation; Adaptation, de-adaptation, Maladaption, and re-adaptation;
- 7. Laws of Adaptation.
- **8.** Principles of Loading.
- 9. Judgment of Training Load: Objectives and Subjective Means.

UNIT II

Over Load: Meaning, Causes, Symptoms and Tackling of Over Load.

- 1. Principles of Sports Training
- 2. Recovery and its phases, Factors Affecting recovery, Means of Faster recovery.
- 3. Types of Training Means.

UNIT III

Conditional Abilities:

- **1.** Strength: Meaning, Forms, Factors determining, Strength Training Methods, Organisation of Strength Training, General Guidelines for Strength Training, Principles of Strength Training, Strength Training for Children and Women.
- 2. Speed:- Meaning, Forms of Speed, Factors determining Speed Barrier.
- **3.** Endurance:-Meaning and Significance, Forms of Endurance, Factors determining Endurance, Training Methods.

UNIT IV

Motor abilities

Motor Abilities - Meaning of Flexibility, Forms of Flexibility, Factors determining Flexibility, Methods for Flexibility training, and Guidelines for Flexibility Training.

- **1.** Coordinative Abilities Meaning , Types of Coordinative Abilities, Characteristics of Coordinative Abilities, Importance of coordinative Abilities, Methods for Coordinative Ability Training.
- **2.** Periodisation Meaning and Types of periodisation, contents of training for different periods.
- **3.** Planning & Meaning, Principles of Planning, Types of Training Plans.
- **4.** Competitions:- Importance of Competitive Frequency, Preparation for Competitions.

UNIT V

- 1. Bio-mechanics Meaning, justification & Importance
- 2. Relative motion, cause of motion, kinds of motion
- **3.** Kinematics Linear, kinematics, distance and displacement Speed velocity and acceleration.
- 4. i) Projectiles, Trajectory, angle of release, velocity of release height of release
- ii) Centripetal and Centrifugal forces
- iii) Rebound; angle of rebounels, Type and effect of spin, Ball Spin (swing)
- iv) work-power Energy, kinds of liver.

References:

- 1. Dick, F.W.: Sports Training Principles, Lepus, London1980
- **2.** Enson, C.R. Fischer AC : Scientific basis of Atheletic conditioning, Lea and Feliger, Philadelphia, 1979
- 3. Brook, J.D. Whiting H.T.A: Human Movement a Field of study.
- **4.** Dr. Singh Hardgal: The Science -9 sports trainging
- **5.** Cooper, K.H.: The Aerobic way, Bantom books Inc. 1978
- 6. Bunn, J.W.: Scientific Principles of coaching, Englewood ciffs, Prentice Hall
- 7. Breer Merison, R.: Efficiency of Human Movement London W.B. Saunders.

PAPER-IV 02MPHY201 DISSERTATION