

SCHOOL OF STUDIES OF EDUCATION
DEPARTMENT OF PHYSICAL EDUCATION
GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.) (A CENTRAL UNIVERSITY)
SCHEME OF EXAMINATION Ph.D. Course

| COURSE CODE-502 | | | | |
|------------------------|---|--------------|-----------------------|-------|
| Code | Title of Paper | Paper Number | Minimum Passing Marks | Total |
| PEDATC1 | Research Process in Physical Education | I | 40 | 100 |
| PEDATC2 | Human Performance in Physical Education | II | 40 | 100 |
| PEDATC3 | Statistics and Computer Application in Physical Education | III | 40 | 100 |

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DOCTORAL OF PHYSICAL EDUCATION
SCHEME OF EXAMINATION Ph.D. PROGRAMME

Programme Outcomes: Graduates will be able to:

- PO1-** To make dynamic leaders in the field of Physical Education.
- PO2-** To apply the knowledge of Physical Education in other Field.
- PO3-** To engage in independent lifelong learning in context to professional and research ethics, health and wellness.
- PO4-** To initiate own start-ups in the field of sports, health and fitness.
- PO5-** To develop professional ethical principles in teaching learning process.
- PO6-** To make young physical education teacher in higher education system.
- PO7-** To make Assistant Director/Sports officer/SAS officer/trainer/Volunteers/sports entrepreneurship.

Programme Specific Outcomes:

PSO1: To prepare young physical education professional for college and university level.

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(A Central University established by the Central Universities Act 2009)
Pre Ph.D. Course Work Syllabus
PEDATC1 - RESEARCH PROCESS IN PHYSICAL EDUCATION (PAPER-I)

Course Objectives:- The objectives of this course are to expose the scholars to the range of research methods, to make familiar them with research and publication ethics, and provide guidance in the essentials of research report writing by using.

Course Outcomes: At the end of the course, it is expected that the scholars will be able to conduct doctrinal and non-doctrinal research on any topic, and will also be able to analyse qualitative and quantitative data, to write research proposal and report.

1. To define research and describe the needs, nature and classify of research process and research methods.
2. To understand the research context within the area of physical Education and sports.
3. To understand the processes and requirements for conducting successful research in physical education and sports.
4. Understand and apply research methods.

Unit-1

Introduction:

1. What, Why and how of Research in Physical Education & Sports.
2. Nature of research
3. Scientific method of problem solving
4. Overview of research process
5. Modern trends of Research in Physical Education & Sports
6. **Unscientific Versus Scientific Methods of Problem Solving**
7. **Areas of Scientific Dishonesty**

Unit-II

Research Problem:

1. Identifying the Research problem
2. Stating the Research Problem
3. Presenting the Research Problem
4. Hypothesis, Limitations and delimitations.
5. Justifying the significance of the study.

Unit-III

Review of Related Literature:

1. Meaning and types of Related Literature
2. Purpose of the Literature search
3. Steps in Literature search
4. Quoting related Literature

Unit-IV

Methods of Research:

1. Analytical Research
2. Descriptive Research
3. Experimental Research and research designs.
4. Qualitative Research
5. Ethical Issues in Research and Scholarship
6. **Working with faculty**

Unit-V

Research Proposal

1. Need of research proposal
2. Preparation of research proposal
3. Purpose of writing research proposal

Research Report:

1. Parts of the research report
2. Problems of preparation of research report
3. Characteristics of good research report

Method of writing abstract and full paper

Making Oral and Poster Presentations

Research Papers and Abstract: Differences between the-thesis-and-the research article.

Course Outcomes and their mapping with Programme Outcomes:

| CO | PO | | | | | | | | PSO |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PSO1 |
| CO1 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 3 |
| CO2 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 3 |
| CO3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 |
| CO4 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 3 |

Weightage: 1-Sightly; 2-Moderately; 3-Strongly

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Pre Ph.D. Course Work Syllabus

PEDATC2 - HUMAN PERFORMANCE IN PHYSICAL EDUCATION (PAPER-II)

COURSE OBJECTIVES:

- The objective of this course is to serve the research needs of the PhD Pre-course work program in the areas of sports, clinical exercise physiology, sports psychology and evaluation of various fitness tests.
- The laboratories adhere to basic requirements of environmental health & psychological wellness.
- To understand the concept of motor fitness, general motor ability, motor educability test and skill test.

COURSE OUTCOME:

- It is expected that the students will be able to understand about motor fitness, general motor ability, motor educability test and skill test.
- It is expected that at the end of the course, the students will be able to understand about assessment of various vital organic functions.

Unit-I

Assessment & Evaluation of Health

1. Body mass Index.
2. Body Fat Mass.
3. Fat Percentage.
4. Anthropometric parameters.

UNIT-II

Assessment & Evaluation of Fitness

1. Motor fitness test
2. General motor ability test
3. Motor educability test
4. Measurement of organic functions

UNIT III

Tests

1. Classification of test
2. Construction of test-
 - a) Knowledge test
 - b) Fitness test
 - c) Skill test

UNIT IV

A. Psychological Tests

1. Personality and behavioural test
2. Social adjustment test.
3. Anxiety test.
4. Motivational test.

B. Physiological Tests

1. Vital capacity.
2. Vo₂ Max.
3. Lactic acid analysis.
4. Heart rate.
5. Respiratory Rate.

UNIT- V

Skill Tests

1. Basketball- Knox basketball test, Johnson basketball test
2. Badminton- Lockhart McPherson badminton test, Miller volley test
3. Soccer/ Football- McDonald soccer test,. Johnson Soccer test
4. Volleyball-Brady volleyball test, Russell Lange test

Course Outcomes and their mapping with Programme Outcomes:

| CO | PO | | | | | | | | PSO |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PSO1 |
| CO1 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 3 |
| CO2 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 3 |

Weightage: **1-Sightly; 2-Moderately; 3-Strongly**

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Pre Ph.D. Course Work Syllabus

**PEDATC3 - STATISTICS AND COMPUTENR APPLICATION IN PHYSICAL EDUCATION
(PAPER-III)**

Course Objectives: The objectives of this course are to expose the students to the brief range of statistical knowledge, to make familiar them with basics of statistical analysis, and provide guidance in the essentials of statistical models by using.

Course Outcomes: - On completion of the course the student shall understand the following concepts:

1. Need for statistics in physical education and research
2. Measures of Central Tendency and dispersion and their uses
3. Meaning and importance of graphical representation of data
4. Knowledge of Inferential and Comparative Statistics
5. Application of various statistical techniques

Note:- This paper shall consist of five units, Each scholar is required to attempt five questions in all Questions shall be asked from each unit with internal choice and a scholar has to attempt one of these. Each unit carries 20 marks.

Unit-1

Introduction to Statistics-Need and importance of statistics in physical education and sports
Definition and classification of data, frequency distribution, cumulative frequency,
Graphical representation of data: bar diagrams, pie diagrams, pictograms and line graphs (ungrouped data), histogram, frequency polygon, cumulative frequency graph, cumulative frequency percentage curve (grouped data)

Unit-II

Properties of Normal Distribution-Meaning and characteristics and properties of normal distribution,
Testing of Normal Curve

Unit-III

Measures of Central Tendency and Variability
Measures of central tendency -Meaning and characteristics of mean, median and mode, Computation of mean, median and mode
Measures of Variability -Computation of range, average deviation and standard deviation, Computation of percentiles, quartiles and deciles

Unit-IV

Testing of Hypothesis:-Differences between Groups- Concept of t-test, computation of dependent and independent t-test
Analysis of Variance-Computation of one-way or simple analysis of variance, multi-group or factorial analysis.of variance and repeated measures analysis of variance.
Correlation-Concept and nature of correlation, Need and importance of partial-correlation, Computation of partial correlation.
Introduction to Microsoft Office Introduction to MS Word: creating, saving and opening a document, drawing table, page setup, spelling grammar check, Printing option, Adding headers and footers.
Introduction to MS Excel: creating, saving and opening a spreadsheet, formatting and editing features, creating formulas, adjusting columns width and row height, understanding charts.
Introduction to MS Power Point: creating, saving and opening a ppt file, formatting and editing feature, slide show, design, inserting slide number, picture, graph. Non-parametric techniques- Chi square and rank order correlation.

Unit-V

Introduction to SPSS Need and importance of SPSS in physical education and sports, Creating and saving a SPSS data file ,Data entry and Analysis of: Descriptive Statistics, Student t-test , Correlation , One way and two way ANOVA, Post hoc test Scheffe's, Tukey and Least Significant Differences

(LSD).

Course Outcomes and their mapping with Programme Outcomes:

| CO | PO | | | | | | | | PSO |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PSO1 |
| CO1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| CO5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Weightage: **1-Sightly; 2-Moderately; 3-Strongly**