

GURU KASHI UNIVERSITY



Doctor of Philosophy

Session: 2025-26

Faculty of Physical Education

Sr. No.	Program Structure							Internal	External	Total Marks
	Course Code	Course Title	Type of Course	L	T	P	Credits			
1	PPH105	Research Methodology	Core	4	0	0	4	30	70	100
2	PPH102	Research and Publication Ethics	Core	2	0	0	2	30	70	100
3	PPH135	Sports Physiotherapy and Rehabilitation	Core	4	0	0	4	30	70	100
4	PPH104	Computer Applications in Research	Skill Based	0	0	4	2	30	70	100
Total				10	0	4	12	120	280	400

Course Title: Research Methodology

Course Code: PPH105

L	T	P	Credits
4	0	0	4

Total Hrs.60

Learning Outcomes

On successful completion of this course, the students will be able to

1. Discuss the various kinds of research, objectives, hypothesis and research process, and sampling.
2. Demonstrate the research design and methods needed in the field study.
3. Examine the various research papers, policy papers and reports of Social Science.
4. Formulate the charts, tables and graphs, commonly found in Social Sciences.

Course Content

Unit-I

13 Hours

1. Research in Social Sciences: Meaning, Nature and Problems
2. Methods of Research in Social Sciences

Unit-II

17 Hours

3. Research Design: Meaning, Types and Steps involved in the formulation of Research Design.
4. Techniques and Methods of data collection: Observation, Interview, Questionnaire and Schedule, Case Study, Historical, Experimental, Survey Method and Likert scale, Semantic scale.

Unit- III

16 Hours

5. Sampling Techniques: Probability and Non-probability methods. Qualities of a Good Sample
6. Testing of Hypotheses, Methods of data analysis: Analysis of quantitative data and its presentation with tables, graphs etc., measures of central tendency, dispersion.

Unit-IV

14 Hours

7. Research and Academic Integrity: Copyright issues, Objectivity and Plagiarism in research
8. Report writing and Thesis Writing.

Transaction Mode

- Group Discussion, Quiz, Open Talk, One-minute presentation, Assignment

Suggested Readings

- Montgomery, D. C & Kowalski, S. M. (2007). *Design and Analysis of Experiments*, Hoboken, New Jersey: John Wiley and Son.
- Kothari, C.K. (2004). *Research Methodology: Methods and Techniques*, New Delhi: New Age International Publication.
- Krishna swamy, K N, Siva kumar, AI & Mathirajan, M. (2005). *Research Methodology: Integration of Principles, Methods and Techniques*, New Delhi: Pearson Education.
- Chawla, Deepak & Sondhi, Neena. (2002). *Research Methodology Concepts and Cases*, New Delhi: Vikas Publishing House Pvt Ltd.
- Panneerselvam, R. (1998). *Research Methodology*, New Delhi: PHI Publication.
- Cooper, D. R., Schindler, P. S. (2016). *Business Research Methods*, New York: Tata McGraw Hill.
- Gupta, S. P. (2021) *Statistical Methods*, Delhi: Sultan Chand & Sons Publication

(Forty Sixth Revised Edition).

- Ronald, E. Walpole.(2017) .*Probability and Statistics for Engineers and Scientists* (9th ed), Boston: Pearson Publication.Babbie,Earl(2010):*ThePracticeof SocialResearch*,12th ed.,Belmont:Wadsworth.
- Bryman, Alan (2012): *Social Research Methods*, 4th ed., Oxford: Oxford UniversityPress.
- Bryman,Alan,(2018),*SocialResearchMethods*, (5thed.).NewDelhi:OxfordUnivers
ityPress.
- Della Porta, Donatella and Michael Keating (2008): —How Many Approaches in theSocialSciences?An EpistemologicalIntroduction, in:DonatelladellaPortaandMichaelKeating(eds.), *ApproachesandMethodologiesintheSocialSciences*,Cambridge:CambridgeUnive
rsityPress.
- Denzin, Norman and Yvonna Lincoln (2013): —*Introduction: The Discipline andPractice of Qualitative Research*, in Norman Denzin and Yvonna Lincoln, *CollectingandInterpreting QualitativeMaterials*,London: Sage.
- Giri,Arunangshu,Biswas,Debasish,(2019),*ResearchMethodologyForSocialScie
nces*,NewDelhi:SagePublicationsIndiaPvtLtd.
- Kumar,Ranjit,(2019),*ResearchMethodology:AStep-By-StepGuideForBeginners*, (5thed.).NewDelhi:Sage PublicationsAsia-PacificLtd.
- Lune,Howard,Berg,Bruce,L.(2017),*QualitativeResearchMethodsForSocialScien
ces*, (9thed.).PearsonIndia.
- Neuman, W.Lawrence, (2014), *SocialResearchMethods:QualitativeandQuantitativeApproaches*, (7thed.). U.S.A:Pearson EducationLimited.
- Gupta, S.C. and Kumar, V. (2020), *Fundamentals of Mathematical Statistics*.Sultan Chand and Sons.

Course Title: Research and Publication Ethics

Course Code: PPH102

L	T	P	Credits
2	0	0	2

Total Hours 30

Learning Outcomes

On the completion of the course the students will be able to

1. To have awareness about the publication ethics and publication misconducts.
2. To understand indexing and citation databases, open access publications, research metrics (citations, h-index, impact factor etc.)
3. Develop hands-on skills to identify research misconduct and predatory publications.

Course Content

- **RPE 01: PHILOSOPHY AND ETHICS (3 Hrs.)**
 1. Introduction to philosophy: definition, nature and scope, concept, branches
 2. Ethics: definition, moral philosophy, nature of moral judgements and reactions
- **RPE 02: SCIENTIFIC CONDUCT (5 Hrs.)**
 1. Ethics with respect to science and research
 2. Intellectual honesty and research integrity
 3. Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
 4. Redundant publications: duplicate and overlapping publications, salami slicing
 5. Selective reporting and misrepresentation of data
- **RPE 03: PUBLICATION ETHICS (7 Hrs.)**
 1. Publication ethics: definition, introduction and importance
 2. Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.
 3. Conflicts of interest
 4. Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types
 5. Violation of publication ethics, authorship and contributor ship
 6. Identification of publication misconduct, complaints and appeals
 7. Predatory publishers and journals

PRACTICE

- **RPE 04: OPEN ACCESS PUBLISHING (4 Hrs.)**
 1. Open access publications and initiatives
 2. SHERPA/ROMEO online resource to check publisher copyright & self-archiving policies
 3. Software tool to identify predatory publications developed by SPPU
 4. Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

- **RPE 05: PUBLICATION MISCONDUCT (4 Hrs.)**
 - A. Group Discussions (2 hrs.)**
 1. Subject specific ethical issues, FFP, authorship
 2. Conflicts of interest
 3. Complaints and appeals: examples and fraud from India and abroad
 - B. Software tools (2 hrs.)**

Use of plagiarism software like Turnitin, Urkund and other open source software tools

- **RPE 06: DATABASES AND RESEARCH METRICS (7 Hrs.)**
 - A. Databases (4 hrs.)**
 1. Indexing databases
 2. Citation databases: Web of Science, Scopus etc.
 - B. Research Metrics (3 hrs.)**
 1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
 2. Metrics: h-index, g-index, i10 index, altmetrics

Suggested Readings

1. Bird, A. (2006). Philosophy of Science. Routledge.
2. MacIntyre, A. (1967) A Short History of Ethics. London.
3. P. Chaddah, (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:978-9387480865
4. National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition. National Academies Press.
5. Rensik, D. B. (2011). What is ethics in research & why is it important. National Institute of Environmental Health Sciences, 1-10. Retrieved from <https://www.niehs.nih.gov/resources/bioethics/whatis/index.cfm>
6. Beall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179-179. <https://doi.org/10.1038/489179a>

Course Title: Sports Physiotherapy and Rehabilitation

Course Code: PPH135

L	T	P	Credits
4	0	0	4

Total Hours: 60

Learning Outcomes

: On successful completion of this course, the students will be able to:

1. Acknowledge the role of preventive sports medicine in field of sports.
2. Conduct sports injuries first aid and rehabilitation program.
3. Outline the management plan for various types of sports injuries
4. Understand the role of electrotherapy in symptomatic relief in sports injuries.

Course Content

Unit-I

(12 Hours)

- Meaning of sports physiotherapy
- Need and importance of Sports Physiotherapy and Sports Rehabilitation
- Sports Medicine (Preventive, curative and rehabilitative aspects).
- Sports Injuries:
 - (a) Nature and Scope of injuries in Sports Programmer. Classification of injuries. Causes of injuries in Sports
 - (b) First-aid box and its requirements on the play field. Qualification and duties of trainer and coach in First-aid Sports Medicine Clinic - An outline.

Unit-II

(08 Hours)

- Management of Sports injuries:
 - (a) Soft-tissue injuries:
 - i) Injuries to skeletal Muscie & tender- strain, pull, cramp, tear myosities, tendinitis.
 - ii) Injuries to skull -abrasion, cuts, boils.
 - iii) Injuries to ligaments & Cartilage-Sprain, sunovities.
 - iv) Injuries to other vital organs
 - b) First-aid Management and rehabilitation progamme
 - i) Fractures-types and nature
 - ii) First aid to fractures
 - iii) Dislocation- common joints involved in dislocation.

Unit-III

(12 Hours)

- Physiotherapy and its use in the treatment and rehabilitation in Sports injuries.
 - a) Exercise Therapy b Principles of the prescription of exercise Therapy
 - b) Massage - Types & Techniques of Massage b indication and counter indication of massage therapy
 - c) Heat Therapy: Hot Water fermentation: Its uses and effects
 - d) Ice cold treatment: its uses and effects.
 - e) Electrotherapy: General introductory working Knowledge of following instruments: Ultra - Violet, infra-red Lamp, Ultra Sonic, Short wave diathermy.

Unit-IV

(08 Hours)

Active Treatments

- a) Strengthening Exercises
 - i. Isometric, Isotonic and Isokinetic Exercises
 - ii. Eccentric exercises and Concentric exercises
 - iii. Stretching exercise
- b) Rehabilitation exercise programmer for various joints of the body

Transaction Mode -

- Case analysis
- Demonstration
- Team Teaching
- Brain Storming

Suggested Readings:

- Borozne, Joseph & Pechar Stanley (2019): *Safety in Team Sports*. Washington, Aahper pub.
- Domron, C. F. & Wisconsin, Modison (2020): *Accident Surveillance system for Sports*, Washington, Ashper pub.
- Borozne, Joseph & Pechar, Stanely (2018): *Safety in Aquatic Activities*, Washington, Aahper pub.
- Borozne, Joseph & Pechar, Stanley (2018): *Safety in individual & Dual Sports*, Washington, Aahper pub.

- Yost Charles Peter (2019): *Teaching Safety in the Elementary School*, Washington, Aahper pub.
- Clarke Kenneth S. (2020): *Drugs & the Coach*, Washington, Aahper pub.

Course Title: Computer Applications in Research

Course Code: PPH104

L	T	P	Credits
0	0	4	2

Total Hours 30

Learning Outcomes

On the completion of the course the students will be able to

1. The students will become familiar with the usage of software for managing the reference.
2. To make literature reviews easily.
3. To make reference management by using open software.

Course Content

Unit I

(06 Hours)

MS Word Essentials- Create a document with styled headings and subheadings, Add headers, footers, and page numbers, Adjust page layout settings (margins, orientation, page size).

Table Creation and Management- Insert, format, and style tables, Adjust cell size, merge/split cells, and sort/filter data.

Working with Graphics- Insert and format images, shapes, SmartArt, and text boxes, Apply text wrapping around objects.

Unit II

(08 Hours)

Basics of PowerPoint- Slide layouts, themes, and templates, Adding multimedia: Images, audio, and videos.

Advanced Techniques- Animations and transitions for visual effects, Slide master for consistent formatting, Interactive elements: Hyperlinks and action buttons.

Design Best Practices- Typography, color schemes, and visual hierarchy, Tips for engaging presentations.

Unit III

(08 Hours)

Introduction to Mendeley- Installing and setting up Mendeley Desktop and Web, Importing references from various sources.

Organizing References- Creating folders and tagging references, Annotating and highlighting PDFs.

Citations and Bibliography- Integrating Mendeley with MS Word, using citation styles (APA, MLA, Chicago), Generating a bibliography automatically.

Unit IV

(08 Hours)

AI Tools for Productivity- Text-Based AI Tools (e.g., ChatGPT) Writing assistance, summarization,

and brainstorming, Grammar and style checking, Image and Design Tools, Speech and Audio Tools

Suggested Readings

- 1) Office 2007 in Simple Steps, Kogent Solutions, (Wiley Publishers).
- 2) MS-Office 2007 Training Guide, S. Jain (BPB Publications).
- 3) Computer Fundamentals by P.K. Sinha (BPB Publications).
- 4) <https://www.mendeley.com/reference-management/reference-manager>
- 5) <https://chat.openai.com>
- 6) <https://edu.google.com/workspace-for-education/classroom/>