## GURUKULA KANGRI VISHWAVIDYALAYA, HARIDWAR (UTTARAKHAND)

### **ORDINANCE**



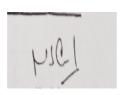


# Doctorate of Philosophy in Physical Education (Course work VI months)

July 2022 Revised Syllabus w. e. f. July 2022

## DEPARTMENT OF PHYSICAL EDUCATION& SPORTS FACULTY OF YOGA AND PHYSICAL EDUCATION







### CURRICULUM FRAMEWORK Doctorate of Philosophy in Physical Education

#### **Programme Outcomes:**

- Doctorate of Philosophy in Physical Education (minimum three years programme including course work of 6 months) programme is a professional programme meant for preparing teachers of Physical Education in Higher Education.
- The course prepares the leaders in Physical Education who act as Mentors and Motivators for Higher Education.
- To prepare recreational leaders who will motivate and guide the students in adopting healthy recreational habits.
- To identify and groom sports talent at college level and promote to achieve sports carrier.
- The program content will make the scholars to get the detailed knowledge about hidden areas of Physical Education and Sports.
- The students will be able to learn about the role of administration for smooth functioning in Physical Education.
- This program will enable the scholars to understand the concept of organisation, administration, management (office and class) and Budgeting in Physical Education.
- The program will enable the students to know about meaning and significance of Sports Training.
- The students will be provided understanding of various aspects- Biological, Philosophical and Psychological foundations of Physical Education, Kinesiology and its application in Sports.
- The course prepares the students who can become Assistant Professor's, Sports Officers, Research Assistants and Scientists in the field of Physical Education and Sports.

#### **Programme Specific Outcomes (PSOs)**

The learning and abilities or skills that a student would have developed by the end of two-year **M.P.Ed.** (Two Year Degree Program):

PSO-1	Remembering and Understanding the concepts of research, statistics, Publication Ethics, Measurement, Evaluation and Science of Sports Training, Exercise Physiology, Sports Management and Yogic Sciences, Sports Psychology and Sports Sociology, Biomechanics and Sports Medicine of physical education and sports sciences.		
PSO-2	Applying various concepts, theories, procedures and skills in different sports situations and in Physical Education.		
PSO-3	Analysing and relating various tests, skills and operational ideas in physical education.		
PSO-4	Evaluating and measuring the qualitative and quantitative data.		
PSO-5	Creating and designing research problem, research report, training sessions and other research related materials.		

#### **Programme Structure**

The Pre Ph.D. course shall comprise of only one semester (i.e. six months) in which there will be two compulsory papers:

S. No.	Subject Code	Subjects	Marks	Credits
1	PPE-C101	Paper-I: Research Methodology	100	6
2-	PPE- C 102	Paper-II Research Publication Ethics	100	2
2	PPE-C103	Paper-III: Teacher Education in Physical Education	100	6

#### Paper -I (PPE-C101)

#### **Research Methodology**

- **CO-1.** Describing the concepts of Research.
- **CO-2.** Extending various research tools and sampling techniques.
- **CO-3.** Identifying various types of data analysis.
- **CO-4.** Developing the knowledge of Research / Project Proposal and Event Organization.
- **CO-5.** Recognizing the methods and concept of Computer Application and Software.

#### Unit-I -Introduction to Research

- 1. Meaning and classification of research (Action, Fundamental, Experimental, Quasi-Experimental, Non-experimental quantitative, Qualitative, Case study, Philosophical, Historical and Ethnographic research. Nature and scope of Research in Physical Education & Sports.
- 2. Research Problem: Developing a research Question, Identifying, Locating, Selecting a research problem and criteria of a good research.
- 3. Hypotheses: Meaning, Types and Importance and criteria of formulating hypotheses.
- 4. Research design in quantitative research: purpose of research design characteristics of good research design.

#### **Unit-II: - Research Tools and Sampling**

- 1. Variables: Nature and types
- 2. Review of Related Literature: Meaning, Importance, Sources and Steps in writing reviews.
- 3. Techniques of developing a good measuring instrument
- 4. Sample: Meaning, Types, Criteria for selecting a sample and Characteristics of a good sample.
- 5. Questionnaire: It's Types, Formulation and Administration of questionnaire. Schedules

#### **Unit-III:** Data Analysis

- 1. Statistics: Meaning, Types (Parametric, Non-parametric, Descriptive and Inferential) Importance in Physical Education.
- 2. Concept and Levels of measurement: nominal, ordinal, interval and ratio.
- 3. Selecting statistical tools {measures of central tendency: (Mean, Median, Mode, SD)
- 4. Measures of Variability (Standard Deviation, Quartile deviation, Range, Percentile)
- 5. Chi square, 't' test, Correlation, ANOVA, ANCOVA} for research in Physical Education and Sports.

#### **Unit-IV:** Research / Project Proposal and Event Organization

- 1. Basic knowledge of organizing conferences, seminars, symposium, workshop, exhibition.
- 2. Formulation of Research Proposal: Introduction, Statement of the problem, Objectives, Hypotheses, Delimitations, Limitations, Significance, Review of related literature, Sample,

- Variables, Criterion Measures, Methodology of data collection, Statistical tool, Bibliography and Appendices.
- 3. Report Writing: Introduction, the main body, Footnotes and Bibliography, Editing the final draft of report, Check list for a good research report/research paper, Project Proposal: Types (major, minor), Method of Writing project proposal.

#### **Unit-V:** Computer Application and Software

- 1. Introduction to Computers: Meaning, Importance in Physical Education, Input and Output devices
- 2. Operating System (OS): Meaning and Functions of OS
- 3. MS Office: MSWord, MS Excel, Ms Power Point: introduction working with power points, inserting text objects, formatting text,
- 4. Introduction to data analysis through SPSS Software

#### **Suggested readings: (For Research Methodology)**

- 1. Best, John W.: Research in Education
- 2. Garret, H.E.: Statistics in Psychology and Education
- 3. Kapil, H.K.: Shaikshik Anusandhan
- 4. Gupta, S.P.: Statistical Techniques
- 5. Lindguist, E.F.: Design and Analysis in Psychology and Education
- 6. Siegel, S.: Non parametric statistics for Behaviour Sciences.
- 7. Tuckman, B. W.: Conducting, Educational Research. New York: Harcourt Bruce, Jouanovich Inc.
- 8. Kamlesh M L: Research methodology in Physical Education
- 9. Verma J P: Statistics in Physical Education

#### (For Computer Applications)

- 1. P.K. Sinha "Computer Fundamentals", BPB Publications, 1992.
- 2. Guy-Hart Davis "The ABCs of Microsoft Office 97 Professional edition" BPB Publication, 1998.
- 3. Karl Schwartz, "Microsoft Window 98 Training Guide" 1998
- 4. Write and Publish a Scientific Paper by Robert A. Day Oryx Press
- 5. Scientific Easy when you know how by Jennifer Peat BMJ Books.
- 6. Research Project and Research Proposals a guide for scientists seeking funding by paul G. Chapin Cambridge University Press.

#### Paper -II (PPE-C102)

#### **Research Publication Ethics**

- **CO-1.** Memorizing the Philosophy of Science and Ethics.
- **CO-2.** Describing the various concepts of Intellectual honesty.
- **CO-3.** Identifying the experience of plagiarisms.
- **CO-4.** Estimating the concept of Publication Ethics.

**Philosophy of Science and Ethics, Scientific Conduct**- Introduction, definition, nature and scope, moral philosophy, ethics with respect to science and research; Scientific conduct- Intellectual honesty and research, integrity falsification plagiarisms, self-plagiarism (plagiarism software-Urkund and Turnitin); duplicate and overlapping publication

**Publication Ethics-** Definition, conflict of interest, publication misconduct (definition, concept on ethical behaviour), violation of publication ethics (authorship and contributor ship): predatory publisher and journal, data base, citation data base (Web of science and Scopus) research matrix Impact factor, journal citation report), H-index, g-index, i-10index; open access publication; software tools to identify predatory publication

#### Paper-III (PPE-C103)

#### **Teacher's Education in Physical Education**

The Course learning outcomes (COs): On completion of the Ph.D. program, the scholars will be learning and able to do/perform the following......

- **CO-1.** Defining the concept of measurement, Evaluation and science of Sports sciences.
- **CO-2.** Describing the mechanism of muscular contraction, energy sources and drugs.
- **CO-3.** Generalizing the mechanism of Sports management and yogic sciences.
- **CO-4.** Interpreting the knowledge of Sports psychology and sports sociology.
- **CO-5.** Predicting and analysing the mechanics used in sports.

#### Unit-I- Measurement, Evaluation and Science of Sports Training

- 1. Criteria of test Selections –Selections authenticity, (Reliability, validity, objective, norms) administrative feasibility and education application.
- 2. Classification of tests: Standardized and teacher made tests (Objective and subjective tests)
- 3. Training load. Load, Adaptation, and Recovery, Periodization.
- 4. Skills & techniques, Tactics & strategies, Competition planning & preparation, Planning, Organization & evaluation of coaching.

#### **Unit-II-Exercise Physiology**

- 1. Concept of Exercise Physiology, New Trends in Exercise Physiology.
- 2. Physiology of Muscular activity, Neurotransmission and Movement mechanism and effects of exercise
- 3. Physiology of respiration and effects of exercise
- 4. Physiology of blood circulation and effects of exercise
- 5. Bioenergetics and recovery process.

#### **Unit-III- Sports Management and Yogic Sciences**

- 1. Modern concept of Management, Structure of Management.
- 2. New trends of Management, Role of sports professionals in developing human resources in society, Public relations.
- 3. Meaning and Definition of Yoga, Scope of Yoga, Aims and Objectives of Yoga.
- 4. Eight limbs of Yoga, Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhayana, and Samadhi.

#### **Unit-IV-Sports Psychology and Sports Sociology**

- 1. Modern concept of **Sports Psychology**, Personality, Theories of motivation: internal process theories, achievement motivation
- 2. Drive, Need, Optimal Arousal, and External Process Theories Incentive, Expectancy theory
- 3. Sport in a Social Institution, Sport is a Social & Cultural Product, Sport as a Social Phenomenon, Sports as a form of Social Involvement.
- 4. Politics in Sport, International Politics & Sports.

#### **Unit-V-Biomechanics and Sports Medicine**

- 1. Distance and displacement (liner and angular), Speed and velocity (linear and angular), Acceleration for linear and angular motion,
- 2. Analysis of Fundamental Skills: Walking, Running, Jumping, Analysis of Sports Skill:
- 3. Modern concept of Sports Medicine, Therapeutic exercises.
- 4. Technique of exercises. Isometric, Isotonic, Isokinetic.

#### **References:**

#### Measurement and Evaluation in Human Performance: References:

- 1. Anspaugh, D.J., M.H. Hamrick and F.D. Rosato. (2001). Wellness Fundamental Concept sand Applications. Mc GrawHill Higher Education Company, Inc. New York, USA.
- 2. Barrow, H.M., R. McGee and K.A. Tritschler (1989). Practical Measurement in Physical Education and Sports. Lea & Febiger, Philadelphia, U.S.A.
- 3. Baumgartner, T.A. and A.S. Jackson (1995). Measurement for Evaluation in Physical Education & Exercise Science. WCB-Brown & Enchmark Publishers, Madison, Wisconsin, USA.
- 4. Chopra, D. (1993). Ageless Body, Timeless Mind: A Practical Alternative to Growing Old. Crown Publishers Inc., New York, USA (Indian Print by Runa & Co. & Gopsons Papers Ltd., Noida, U.P.).
- 5. Dochery, D. (Ed.) 1996. Measurement in Pediatric Exercise Science. Human Kinetics, Champaign, Illinois 61825, USA.
- 6. Hoeger WWK and S.A. Hoeger (2005). Principles and Labs. for Physical Fitness and Wellness. Morton Publishing Company, Englewood, Colarado, USA.
- 7. Kansal, D.K. (2006). Test, Measurement and Evaluation in Physical Educational Sports. Sports and Spiritual Science Publications, New Delhi.

#### **Sport and Exercise Physiology: References:**

- 1. Allen W. Jakson, James R. Morrow (1999) Physical Activity for Health and Fitness. (Human Kinetics).
- 2. American College of Sports Medicine (1991) Guidelines for Exercise Testing and Prescription (4th ed): (Philadelphia; Lea & Febiger).
- 3. Ann F. Cowlin (2002) Women's Fitness Program Development. (Human Kinetics).
- 4. B. Don. Franks, Edward J. Howley. (1995) Fitness Leaders Handbook. (Human Kinetics).
- 5. Claude Bouchard, Roy J. Shephard, Thomas Stephens (1993) Physical Activity, Fitness and Health Consensus Statement. (Human Kinetics Publishers).

#### Science of Sports Training and Conditioning: References:

- 1. Magel, John. (1976). the Scientific Aspects of Sports Training, Medicine & Science in Sports: Volume 8 Issue
- 2. Singh, H. (1991). Science of Sports Training. New Delhi: DVS Publication.
- 3. Uppal. A. K. (2001). Principles of Sports Training. New Delhi: Friends Publication.
- 4. Beashel & Taylor. The World of Sports Examines.

#### **Biomechanics and Human Movements: References:**

- 1. Basis of Human Motion. 8th Ed, Brown & Bench mark.
- 2. Gowitzke, B.A. and Milner, M. (1988). Scientific Bases of Human Movement. (3rd. Ed.), Baltimore: Williams and Wilkins.
- 3. Grimshaw, Paul., Lees, Adrian., Flower, Neil & Burden, Adrian. Sports and Exercise Biomechanics. Taylor & Francis.
- 4. Groves, R and Camaine, D. (1983). Concepts in Kinesiology. (2nd. Ed.). Philadelphia: Saunders College Publishing.
- 5. Hall, Susan J. Basic Biomechanics. Mosby Year Book
- 6. Hay, J. (1978). The biomechanics of sport techniques. (2nd. Ed.). Englewood Cliffs: Prentice-Hall.

#### **Sports Management and Administration: References:**

- 1. Allen, L.A. Management & Organization. Kogakusha Co. Tokyo, 1988.
- 2. Davis, Keith Human Behaviour at work, (New Delhi : Tata Mc Graw-Hill Publishing Compnay Ltd., 1981).
- 3. Francis, James G, and Millbourn Cane Jr. Human Behaviour in the work Environment, (Califoria: Goodyard Publishing Company, Inc. 1980).
- 4. Frost, B. and Lockhart, B.D. Marshall Stanley, J. Administration of Physical Education and Atlatics Concepts.
- 5. Hert, Renis, New Patterns of Management, McGraw Hill, 1961.
- 6. Horine, LARRY, Administration of Physical Education and Sports Programme, (Boul vand :Won C Brown ublisher 1991), 2nd Ed.

#### **Sports Psychology s: References:**

- 1. Aggarwal, J.C., Basic Ideas in Educational Psychology, Delhi: Sipra, 2003.
- 2. Bhatia, Hans Raj, Test Book of Educational Psychology, Delhi: Macmillan, 2003.
- 3. Cashmore, Ellis, Key Concepts in Sport Psychology, London, Routledge, 2004.
- 4. Cox, R. H., Sport Psychology Ed 5 Th., London, Mcgraw Hill, 2002.
- 5. Dewey, John, Psychology, New Delhi: K.S.K., 2003.
- 6. Jain, D., Introduction to Psychology, New Delhi: K.S.K., 2003.

#### **Sports Sociology: References:**

- 1. Birrell, Susan & Cheryl L. Cole. Women, Sport & Culture. Champaign Ill: Human Kinetics, 1994.
- 2. Mc..Pherson, Barry D., Curtis. James E. and Loy, John W. The Social Significance of Sport.Champaign Illinois: Human Kinetics Publishers (1989).
- 3. Loy, John W., Mc. Pherson, Barry D. & Kenyon, Gerald. Sport & Social Systems. Philippines: Addison Wesley Publishing Company (1978).
- 4. Laker, Anthony. The Sociology of Sport and Physical Education. London: Routledge Falmer.2002.
- 5. Yiannakis, Andrew & Merrill J. Meluic. Contemporary Issues in Sociology of Sport. Champaign Ill: Human Kinetics. 2001.

#### **Yogic science: References:**

- 1. Iyengar, B. K. S. (1989). Light on yoga, Yoga Dipika. London: UNWIN paperbacks.
- 2. Kappmeir, K. L. & Ambrosihi, D. M. (2006). Instructing hata yoga. Champaign: Human kinetics.
- 3. Alice, C. (2000). Yoga for sports. Chicago: CB.
- 4. Sawmi Kuvalayanand (19930). Asanas. Lonavla: Kaivalayadham.
- 5. Tiwari, O. P. (2002). Asanas why & how?. Lonavla: Kaivalayadham.
- 6. Shivananda yoga Vedanta centre (1998). Yoga mind & body. London: D. K. paperbacks.

#### **Sports Medicine References:**

- 1. Christopher M. Norris. (1993). Sports Injures Diagnosis and Management for Physiotherapists. East Kilbride: Thomson Litho Ltd.
- 2. James, A. Gould & George J. Davies. (1985). Physical Physical Therapy. Toronto: C.V. Mosby Company.
- 3. Morris B. Million (1984) Sports Injuries and Athletic Problem. New Delhi: Surject Publication.