BANKURA UNIVERSITY

(West Bengal Act XIX of 2013- Bankura University Act, 2013)

Main Campus, Bankura Block-II, P.O.: Purandarpur, Dist.: Bankura, Pin- 722155, West Bengal

Office of the Secretary

Faculty Council for Undergraduate Studies

Ref: BKU/FCUG/108/2026 Date: 12/05/2026

NOTIFICATION

As directed, the undersigned is pleased to inform all concerned that Bankura University has initiated the process to implement New Curriculum and Credit Framework for Undergraduate Programme, UGC 2022 (as per NEP 2020) for 4-years Undergraduate programme with Physical Education and Sports as Major, Minor etc. from the academic session 2023-2024. The syllabus as framed / drafted and partially implemented deserves to be analysed after receiving feedback from different stakeholders. As an important corollary to the process, a workshop will be organized on the date mentioned herewith to get the feedback from the stakeholders. Present Students, Alumni, Guardians, Academicians and other stakeholders related to the specific programme/course are requested for their kind participation in the workshop and to present their views/ observations, etc. The stakeholders may go through the draft syllabus attached herewith and convey their observations to the office of the undersigned on ugsecretaryoffice@bankurauniv.ac.in within three days from the date of publication of this notice.

Date: 14/05/2026
Time: 07:30 PM
Google Meet joining link: meet.google.com/xan-vkqz-ttx

Sd/-
Dr. Arindam Chakraborty
Secretary
Faculty Council for Undergraduate Studies

Ref: BKU/FCUG/108(6)/2026 Date: 12/05/2026

1. Registrar (Addl. Charge), Bankura University.
2. Dean (Officiating), Faculty Council of P.G. Studies in Arts, Science etc. Bankura University.
3. Chairperson / Convenor, Undergraduate Board of Studies in Physical Education and Sports, Bankura University with request for necessary action.
4. System Administrator, Bankura University with request to upload this in website.
5. Secretary, Hon'ble Vice Chancellor, Bankura University.
6. Guard File.

Sd/-
Dr. Arindam Chakraborty
Secretary
Faculty Council for Undergraduate Studies

National Curriculum and Credit Framework

NEP (2020) SYLLABUS

FOR

FOUR YEARS UNDERGRADUATE COURSE

IN

PHYSICAL EDUCATION AND SPORTS

7th Semester

BANKURA UNIVERSITY

BANKURA

WEST BENGAL

PIN 722155

Course Structure with Credit Distribution: U.G. 4 Years Programme with Single Major (NEP 2020)

Category of Course (Credit)	Major Course(4)		Minor Course (4)	Multidisciplinary (3)	Ability Enhancement Course (2)	Skill Enhancement Course (3)	Value Added Course	Summer Internship (2)	Research Project/ Dissertation(12)	Total Credit / No. of Course
SEM	DSC	DSE								
I	1X4=4	-	1X4=4	1X3=3	1X2=2	1X3=3	1X4=4	-	-	20/6
II	1X4=4	-	1X4=4	1X3=3	1X2=2	1X3=3	1X4=4	-	-	20/6
CERTIFICATE Course	*Credit -8*		*Credit -8*	*Credit -6*	*Credit -4*	*Credit -6*	*Credit -8*	Additional (4 Credit)	-	40
III	2X4=8	-	1X4=4	1X3=3	1X2=2	1X3=3	-	-	-	20/6
IV	4X4=16	-	1X4=4	-	1X2=2	-	-	-	-	22/6
DIPLOMA Course	*Credit -32*		*Credit -16*	*Credit -9*	*Credit -8*	*Credit -9*	*Credit -8*	Additional (4 Credit)	-	82
V	4X4=16	-	1X4=4	-	-	-	-	-	-	22/5
VI	4X4=16	-	1X4=4	-	-	-	-	-	-	20/5
DEGREE Course	*Credit -64*		*Credit -24*	*Credit -9*	*Credit -8*	*Credit -9*	*Credit -8*	*Credit -2*	-	124
VII	4X4=16	-	1X4=4	-	-	-	-	-	-	20/5
VIII	4X4=16*	-	1X4=4	-	-	-	-	-	12*	20/5
HONS Course	*Credit -96*		*Credit -32*	*Credit -9*	*Credit -8*	*Credit -9*	*Credit -8*	*Credit -2*	-	164
HONS Course	*Credit -84*		*Credit -32*	*Credit -9*	*Credit -8*	*Credit -9*	*Credit -8*	*Credit -2*	*Credit -12*	

SYLLABUS STRUCTURE FOR PHYSICAL EDUCATION AND SPORTS

B.A Four Years UG Course: 7th Semester

Course Code	Course Title	Course Type	Credit	Marks Division			Total Marks	No. of Hour (L-T-P)
				Int. Ass	Prac	E.S.E		
A/PHES/ 701/ MJC-17	Basics of Research and Applied Statistics in Physical Education and Sports	Major	4	10	--	40	50	4-0-0
A/PHES/ 702/ MJC-18	Sports Nutrition and Diet	Major	4	10	--	40	50	4-0-0
A/PHES/ 703/ MJC-19	Talent Identification and Sports	Major	4	10	--	40	50	4-0-0
A/PHES/ 704/ MJC-20	Major Sports and Games Specialization	Major	4	10	40	--	50	0-0-8
A/PHES/ 702/ MN-7	Sports Nutrition, Talent Identification in Sports and Major Game ***(Not for Major Students of Phy. Edu & Sports)***	Minor	4	*10*	*15*	*25*	*50*	3-0-2
	SEMESTER	TOTAL:	20	50	200		250	

PHES= Physical Education and Sports (Subject Code) C= Core Course, E/H/MIL= English/ Hindi/ Modern Indian Language, H/MIL/E= Hindi/ Modern Indian Language/ English, AECC-E= Ability Enhancement Compulsory Course-English, AECC-ENV= Ability Enhancement Compulsory Course-Environmental Science, Int. Ass= Internal Assessment, ESE= End-Semester Examination, L= Lecture, T= Tutorial, and P=Practical, Prac= Practical, Theo= Theory.

Program Outcomes (Attribute wise)

1. ***Disciplinary Knowledge and Skills:*** The organization of physical and sports activities will develop sense of discipline in the students.
2. ***Skilled Communicator:*** Neuromuscular learning and activation requires good communicable skills on the part of the leader organizing them, which shall be developed in the students in course of their graduation program. Ability will be developed to express thoughts and ideas effectively, demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups. Skills will be developed in verbal and non-verbal communication, preparation and presentation of documents/reports/PPTs. Skills of interpersonal communication and ability to work with diverse population groups, able to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources and develop digital literacy as applicable to the professional needs will also be developed.
3. ***Critical Thinker and Problem Solver:*** Ability to employ critical thinking and efficient problem solving skills through development of new strategies are expected attributing factors.
4. ***Sense of Inquiry:*** Capability for asking relevant/appropriate questions relating to the issues and problems in the field of physical education, fitness and rehabilitation.
5. ***Leadership:*** The orientation in organization of health and sports promoting physical activities develops appropriate leadership capabilities in the students.
6. ***Skilled Manager:*** Capable of identifying or mobilizing appropriate resources required for organizing fruitful training and coaching programme for athletes of various sports.
7. ***Digitally Literate:*** Capable of using computer for keeping the health related data base of the trainees. Formulating appropriate training programme for individuals as per their need. Capable of employing modern library search tools to locate, retrieve, and evaluate Physical Education& Sports related information.
8. ***Ethical Awareness and Reasoning:*** Avoiding unethical behavior and promoting fair play. Discouraging the use of drugs for performance enhancement. Promoting sports for the development of all round personality of the participants.
9. ***Lifelong Learners:*** Capable of self-paced and self-directed learning aimed at personal development.
10. ***Pursuit of Excellence:*** To have a positive attitude towards developing one's own potentials (both biological & cultural) and talents.
11. ***Respect for Diversity:*** An empathy with other's views and needs as well as respect for their elder's opinion, race or religion and also able to value different cultures and traditions.
12. ***Sense of Justice and Equity:*** To able to recognize social justice and act justly; to have a sense of fairness in life especially in sporting situation.
13. ***Cooperation and Team Work:*** Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group and or a team in the interests of a common cause and work efficiently as a player.

Physical Education and Sports

SEMESTER -VII

Course Type – MAJOR -17 Course Code: A/PHES/701/MJC-17

Course Title: BASICS OF RESEARCH AND APPLIED STATISTICS IN PHYSICAL EDUCATION AND SPORTS

Total Marks = 50 {*Theory Marks: 40: Internal Assessment: 10*}

Contact Hours per week: 4 (4 Credits) Examination Duration: 2 hours

COURSE OUTCOMES-

1) Understand the basic framework of research process.
2) Classification of research as per need.
3) Describe the research process and research methods.
4) Identify various sources of information for literature review and data collection.
5) Know how to organize, manage, and present data.
6) Use and apply a wide variety of specific statistical methods.
7) Formulate research problem and construct of tables and graphs.
8) Understand statistical models used in physical education and sports.

THEORY PART: (Total Marks -40)

UNIT-I: *INTRODUCTION TO RESEARCH*

1.1 Concept and Definition of Research, Scope of Research in Physical Education & Sports
1.2 Need and importance of Research in Physical Education and Sports.
1.3 Classification of Research :Analytical, Descriptive, Experimental, Qualitative and Meta Analysis
1.4 Research Problem, Meaning of the term, Location and Criteria of Selection of Problem Formulation of a Research Problem, Limitations and Delimitations.

UNIT-II: *SURVEY OF RELATED LITERATURE*

2.1 Need for surveying related literature, Literature Sources, Library Reading
2.2 Research Proposal, Meaning and Significance of Research Proposal.
2.3 Process of Preparation of Research proposal / project.
2.4 Method of Research Report

UNIT-III: *BASICS OF STATISTICAL ANALYSIS*

3.1 Statistics: Meaning, Definition, Nature and Importance
3.2 Class Intervals: Raw Score, Continuous and Discrete Series, Class Distribution, Construction of Tables
3.3 Normal Curve. Meaning of probability- Principles of normal curve – Properties of normal curve. Divergence form normality – Skewness and Kurtosis.
3.4 Graphical Presentation of Class Distribution: Histogram, Frequency Polygon, Frequency Curve. Cumulative Frequency Polygon, Ogive, Pie Diagram

UNIT- IV: *STATISTICAL MODELS IN PHYSICAL EDUCATION AND SPORTS*

4.1 Measures of Central Tendency: Mean, Median and Mode-Meaning, Definition, Importance, Advantages, Disadvantages and Calculation from Group and Ungrouped data

4.2 Percentiles and Quartiles: Meaning, importance, computing from group and ungroup data

4.3 Measures of Variability: Meaning and importance of measures of Variability, Type of Measure of Variability – Range, Quartile Deviation, Mean Deviation, Standard Deviation and computing from group and ungroup data.

4.4 Concept of Type I error and Type II error – Level of Significance, Testing of Hypothesis – Type and calculation of 't' test, F Test, ANOVA, ANCOVA, Correlation.

QUESTION PATTERN

END SEMESTER EXAMINATION Descriptive Type				Internal Marks	Total Marks
NUMBER OF QUESTIONS TO BE ANSWERED			TOTAL		
02 Mark Question	05 Marks Question	10 Marks Question			
5 Out of 8	4 Out of 6	1 Out of 2	40	10	50
02X5 = 10	05X4 = 20	10X1 = 10			

SUGGESTED READINGS:

1 *Best, J.W. (1963). Research in education. U.S.A.: Prentice Hall*
2 *Bompa, T. O. & Haff, G. G. (2009). Periodization: theory and methodology of training, 5th ed.Champaign, IL: Human Kinetics.*
3 *Brown, L. E., & Ferrigno, V. A. (2005). Training for speed, agility and quickness, 2nd ed.*
4 *Champaign, IL: Human Kinetics.*
5 *Brown, L.E. & Miller, J., (2005). How the training work. In: Training Speed, Agility, and*
6 *Quickness. Brown, L.E. & Ferrigno, V.A & Ferrigno, V.A., eds. Champaign, IL: Human*
7 *Kinetics.*
8 *Carl, E. K., & Daniel, D. A. (1969). Modern principles of athletes training. St. Louis: St. Louis'sMosby Company.*
9 *Clark, H. H., & Clark, D. H. (1975). Research process in physical education. Englewood cliffs,New Jersey: Prentice Hall, Inc.*
10 *Garrett, H.E. (1981). Statistics in psychology and education. New York: Vakils Feffer and SimonLtd.*
11 *Oyster, C. K., Hanten, W. P., & Llorens, L. A. (1987). Introduction to research: A guide for the health science professional. Landon: J.B. Lippincott Company.*
12 *Thomas, J.R., & Nelson J.K. (2005). Research method in physical activity. U.S.A: Champaign,IL: Human Kinetics Books.*
13 *Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2011). Research method in physical activity.*
14 *U.S.A: Champaign, IL: Human Kinetics Books.*
15 *Uppal, A. K. (1990). Physical fitness: how to develop. New Delhi: Friends Publication.*
16 *Verma, J. P. S(2000). A text book on sports statistics. Gwalior: Venus Publications*

Physical Education and Sports

SEMESTER -VII

Course Type – MAJOR -18 Course Code: A/PHES/702/MJC-18

Course Title: SPORTS NUTRITION AND DIET

Total Marks = 50 {*Theory Marks: 40: Internal Assessment: 10*}

Contact Hours per week: 4 (4 Credits) Examination Duration: 2 hours

COURSE OUTCOMES-

1. *Explain basic concepts of nutrition and nutrients.*
2. *Analyze the dietary needs of athletes and physically active individuals.*
3. *Prepare simple balanced diet plans for sports persons.*
4. *Identify nutritional deficiency diseases and preventive measures.*
5. *Apply knowledge of sports nutrition for improved performance and health.*

THEORY PART: (Total Marks - 40)

UNIT- I : FUNDAMENTALS OF NUTRITION

1.1 Concept and definition of nutrition, Classification of nutrients
1.2 Importance of nutrition in sports performance
1.3 Macronutrients and micronutrients, Food groups and nutrients
1.4 Role and Deficiency of carbohydrates, proteins and fats, Vitamins and minerals, Water and electrolyte balance, fibre, Phytonutrients.

UNIT- II : BALANCED DIET AND ENERGY REQUIREMENT

2.1 Concept and principles of balanced diet, Components of balanced diet
2.2 Calculation of Caloric requirement and energy metabolism, Basal metabolic rate (BMR)
2.3 Nutritional requirements for children, adolescents and adults
2.4 Nutritional needs for athletes, Factors influencing dietary needs in sports

UNIT- III : SPORTS NUTRITION AND DIET PLANNING FOR ATHLETES

3.1 Importance of nutrition in sports, Diet before, during and after competition
3.2 Ergogenic aids and supplements
3.3 Steps of energy supply from different types of nutrients, carbohydrate, fat and protein in sports
3.4 Hydration and dehydration in sports, Weight control and body composition in sports

UNIT-IV : NUTRITION, HEALTH AND DISEASE

4.1 Malnutrition and undernutrition, Overnutrition and obesity
4.2 Nutritional deficiency diseases: a) Anaemia, b) Rickets c) Goitre d) Protein-energy malnutrition
4.3 Food safety and hygiene, Protein supplements and energy drinks
4.4 Traditional Indian dietary practices and health

QUESTION PATTERN

END SEMESTER EXAMINATION Descriptive Type			TOTAL	Internal Marks	Total Marks
NUMBER OF QUESTIONS TO BE ANSWERED					
02 Mark Question	05 Marks Question	10 Marks Question			
5 Out of 8	4 Out of 6	1 Out of 2	40	10	50
02X5 = 10	05X4 = 20	10X1 = 10			

SUGGESTED READINGS:

1. *Williams, M. H. Nutrition for Health, Fitness and Sport. McGraw-Hill.*
2. *Anderson, L., Young, L., & Prior, N. Nutrition: An Applied Approach. Pearson.*
3. *Whitney, E., & Rolfes, S. R. Understanding Nutrition. Cengage Learning.*
4. *Benardot, D. Advanced Sports Nutrition. Human Kinetics.*
5. *Jeukendrup, A., & Gleeson, M. Sport Nutrition: An Introduction to Energy Production and Performance. Human Kinetics.*
6. *Burke, L., & Deakin, V. Clinical Sports Nutrition. McGraw-Hill.*
7. *Maughan, R., & Burke, L. Sports Nutrition. Wiley-Blackwell.*
8. *Bamji, M. S., Rao, N. P., & Reddy, V. Textbook of Human Nutrition. Oxford & IBH.*
9. *Mudambi, S., & Rajagopal, M. V. Fundamentals of Foods and Nutrition. New Age International.*
10. *Srilakshmi, B. Nutrition Science. New Age International.*
11. *Swaminathan, M. Handbook of Food and Nutrition. BAPPCO.*
12. *Gopalan, C., Rama Sastri, B., & Balasubramanian, S. Nutritive Value of Indian Foods. National Institute of Nutrition.*
13. *Dietary Guidelines for Indians. National Institute of Nutrition.*
14. *Indian Food Composition Tables. National Institute of Nutrition.*

Physical Education and Sports

SEMESTER – VII

Course Type – MAJOR -19 Course Code: A/PHES/703/MJC-19

Course Title: TALENT IDENTIFICATION IN SPORTS AND GAMES

Total Marks = 50 {Theory Marks: 40: Internal Assessment: 10}
Contact Hours per week: 4 (4 Credits) Examination Duration: 2 hours

COURSE OUTCOMES-

1) *Understand the concept and importance of talent identification in sports and Games*
2) *Explain methods and models of talent identification in sports and Games.*
3) *Conduct and apply talent identification tests and measurements.*
4) *Analyze factors influencing Gamesports talent.*
5) *Design talent identification and development programmes.*
6) *Understand long-term athlete development and talent promotion systems.s and*

THEORY PART: (Total Marks - 40)

UNIT-I: *TALENT IDENTIFICATION IN SPORTS AND GAMES*

1.1 Meaning and definition of Talent Identification in Sports and Games,
1.2 Aim and Objectives of talent identification programs, Importance of talent identification
1.3 Difference between Talent Identification, Talent Selection and Talent Development
1.4 Role of schools, colleges, universities, and sports organisations in identifying talent

UNIT-II: *FACTORS INFLUENCING SPORTS TALENT*

2.1 Physical factors – height, weight, body composition, strength, speed, endurance, flexibility
2.2 Physiological factors – aerobic capacity, anaerobic capacity, heart rate, VO_2 max
2.3 Psychological factors – motivation, confidence, concentration, competitive spirit
2.4 Genetic and environmental factors affecting sports talent, Socio-economic and cultural influences on sports performance.

UNIT-III: *METHODS AND TESTS FOR TALENT IDENTIFICATION*

3.1 Scientific approaches to talent identification. Anthropometric measurements (height, arm span, leg length, etc.)
3.2 Physical fitness tests for identifying talent. Skill-based testing methods
3.3 Use of sports science and technology in talent identification
3.4 Observation and scouting techniques

UNIT-IV: *TALENT IDENTIFICATION PROGRAMS AND MODELS*

4.1 National and international talent identification programs. Role of sports academies and training centres
4.2 Talent identification in different major games and sports.
4.3 Problems and challenges in talent identification, Strategies for improving talent identification systems
4.4 National Talent Identification and Development (NTID)- Australia, Long-Term Athlete Development Model (LTAD) – IOC, National Sports Talent Contest (NSTC) -SAI, KIRTI-Khelo India Talent Identification Programme, TOPS(Target Olympic Podium Scheme)

QUESTION PATTERN

END SEMESTER EXAMINATION Descriptive Type				Internal Marks	Prac. Marks	Total Marks
NUMBER OF QUESTION TO BE ANSWERED			TOTAL			
01 Mark Question	05 Marks Question	10 Marks Question				
5 Out of 8	2 Out of 4	1 Out of 2	25	10	15	50
01X5 = 05	05X2 = 10	10X1 = 10				

SUGGESTED READINGS:

1. *Talent Identification and Development, Author: Dr. Ajmer Singh, Publisher: Kalyani Publishers*
2. *Talent Identification in Sports, Author: Dr. B. P. Singh, Publisher: Friends Publications (India)*
3. *Identification and Development of Sports Talent, Author: Dr. P. K. Nayak, Publisher: Khel Sahitya Kendra*
4. *Sports Talent Identification, Author: Dr. V. K. Sharma, Publisher: Friends Publications (India).*
5. *Talent Identification and Development in Sports, Author: Dr. Ramesh Chandra, Publisher: Sports Publication*
6. *Faazil Mohammed Khan – A Handbook on Sports Training and Talent Identification – Orange Books Publication.*
7. *Baker, Joseph; Cobley, Stephen; Schorer, Jörg – Talent Identification and Development in Sport – Routledge (Taylor & Francis).*
8. *Baker, Joseph et al. – Routledge Handbook of Talent Identification and Development in Sport – Routledge.*

Physical Education and Sports

SEMESTER -VII

Course Type – MAJOR - 20 Course Code: A/PHES/704/MJC-20

Course Title: MAJOR SPORTS AND GAMES SPECIALIZATION

Total Marks = 50 {*Theory Marks: 00: Practical Marks: 40 Internal Assessment: 10*}

Contact Hours per week: 8 (4 Credits) Examination Duration: N.A.

COURSE OUTCOMES-

1) *Historical Knowledge: A broad understanding of how four major sports originated and developed globally.*
2) *Rules Literacy: The ability to understand and explain the core rules and regulations of Major Sports and Games.*
3) *Tactical Awareness: A theoretical foundation in the basic strategies and systems of play for each sport.*
4) *Analytical Skill: The capacity to analyse game situations, identify infractions, and understand officiating decisions.*
5) *Comparative Perspective: An appreciation for the different structures, formats, and governance models across sports.*
6) *Ethical Understanding: A recognition of the importance of fair play and the "Spirit of the game" in all sports.*

PRACTICAL PART: (Total Marks -40) (Preparation of Record Book is Compulsory which will be evaluated by both Internal and External Examiners)

Choose Any One Discipline of Games or Sports with the consultation of the Internal Faculty of the Department

FOOTBALL

Unit 1: History and Development of Football: The historical context and the formation of The Football Association are standard topics in sports history, national and international tournaments, and famous players and Important Results in football (both national and international).

Unit 2: The Field of Play and Equipment: The detailed specifications for the field, goals, and player equipment are derived directly from the official Laws of the Game, preparation of training module for the game of football.

Unit 3: Fundamental Rules of the Game (Laws): The explanations of rules regarding match duration, scoring, and the offside rule are core components of referee education programs, as seen in university sports studies curricula.

Unit 4: Scientific parameters and Game Systems: Different tactics and techniques in the game of football, biomechanical principles acting on different skills of the game, faults and corrections of major techniques, psychological factors affecting performance, scientific developmental exercise

CRICKET

Unit 1: History and Spirit of the Game: The origins, codification of laws, the role of the MCC, and the social history of cricket, including its spread through the British Empire, are well-documented in historical texts and educational resources, national and international tournaments, and famous players and Important Results (both national and international).

Unit 2: The Playing Arena and Equipment and periodization: The specific dimensions of the pitch, wickets, and equipment specifications are detailed in the historical evolution of the Laws of Cricket, preparation of training module for the game of cricket.

Unit 3: Laws of Play - Scoring and Dismissals: The descriptions of scoring and the various methods of dismissal are central to the Laws of Cricket.

Unit 4: Match Formats, Officiating, and Scientific parameters and Scoring Systems: The modern formats (Test, ODI, T20), the follow-on rule, and the Decision Review System (DRS) are governed by the ICC's "Playing Conditions," which are based on the MCC's Laws. biomechanical principles acting on different skills of the game, faults and corrections of major techniques, psychological factors affecting performance, scientific developmental exercise, modern method of match analysis.

VOLLEYBALL

Unit 1: History, Court Dimensions, and Rules: The invention of the game by William G. Morgan in 1895 and its early rules are well-documented. Official court dimensions, net heights, and basic rules are standardised by the FIVB, national and international tournaments, and famous players and Important Results (both national and international).

Unit 2: Understanding the Game and Fundamental Techniques (Theory) periodisation: The theoretical breakdown of fundamental skills like serving, passing, setting, and attacking is a standard part of physical education curricula, preparation of training module for the game of Volleyball.

Unit 3: Laws of the Game: Different laws and rules of the game and their interpretations.

Unit 4: Advanced Skills, Scientific Parameters and Match Conduct: Biomechanical principles acting on different skills of the game, faults and corrections of major techniques, psychological factors affecting performance, scientific developmental exercise, modern method of match analysis.

BADMINTON

Unit 1: History, Equipment, and Court Layout: The origins of the game in British India ("Poona") and its development at Badminton House are standard historical facts. Official court dimensions for singles and doubles are specified in the BWF's "Laws of Badminton".national and international tournaments, and famous players and Important Results (both national and international).

Unit 2: Advanced Skill: Practice of Advanced Skill in Badminton

Unit 3: Laws of the Game: Different laws and rules of the game and their interpretations.

Unit 4: Basic Tactics and Scientific parameters: Basic tactical principles for singles and doubles are a core part of competitive play theory, Biomechanical principles acting on different skills of the game, faults and corrections of major techniques, psychological factors affecting performance, scientific developmental exercise, modern method of match analysis.

KHO-KHO

Unit 1: Origin and History: Tracing the roots of Kho Kho in ancient India. Timeline of Development: Evolution of rules, playing field, and equipment over the years. Kho Kho in the Modern Era: Introduction to major tournaments (Nationals, Asian Games) and governing bodies (Kho Kho Federation of India), national and international tournaments, and famous players and Important Results (both national and international).

Unit 2: The Field of Play, Equipment, and Periodisation: Detailed analysis of the official playing field dimensions, Study of essential equipment such as poles, measurement tools, and score sheets. Comparison of traditional clay/mud surfaces with modern matted surfaces used in professional leagues, preparation of a training module for the game

Unit 3: Laws of the Game: Different laws and rules of the game and their interpretations.

Unit 4: Scientific Parameters and Scoring Systems: Biomechanical principles acting on different skills of the game, faults and corrections of major techniques, psychological factors affecting performance, and scientific developmental exercise, modern method of match analysis.

KABADDI

Unit 1 History and Development of Kabaddi, Ancient Origins: Exploring the mythological and historical roots of Kabaddi in South Asia, Evolution and Codification: The journey from a rural pastime to a standardized sport, Kabaddi at the International Level: Inclusion in Asian Games, Kabaddi World Cup, and the role of the International Kabaddi Federation, Professional Leagues: The impact and transformation of the sport due to leagues like the Pro

Kabaddi League. national and international tournaments, and famous players and Important Results (both national and international).

Unit 2 The Field of Play, Equipment, and Periodization: Detailed analysis of the official playing field dimensions, Study of essential equipment such as mats, scoreboards, whistles, and timing devices. Comparison of traditional mud/clay courts with modern synthetic mat surfaces used in professional competitions, preparation of a training module for the game

Unit 3 Laws of the Game: Different laws and rules of the game and their interpretations.

Unit 4 Scientific Parameters, and Game Systems: Biomechanical principles acting on different skills of the game, faults and corrections of major techniques, psychological factors affecting performance, and scientific developmental exercise, modern method of match analysis.

YOGA

Unit 1 Philosophy and History Development of Yoga: Origins and History -Tracing yoga from the Indus Valley Civilization through the Vedic and Upanishadic periods, Yoga Philosophy: The meaning of yoga as union, and its relation to basic Hindu beliefs and Indian philosophy, Paths of Yoga: Introduction to different styles like Karma Yoga, Bhakti Yoga, Jnana Yoga, and Raja Yoga, Key Texts: Overview of foundational scriptures like the Vedas, Upanishads, Bhagavad Gita, and Patanjali's Yoga Sutras, national and international tournaments, and famous players and Important Results (both national and international).

Unit 2 The Practice Area, Equipment, and Periodization : Practice Area Specifications: Detailed analysis of ideal Yoga practice conditions, including a शांत, clean, and well-ventilated space with sufficient lighting. Explanation of spacing requirements to ensure safe movement and concentration.Equipment Standards: Study of essential equipment such as Yoga mats, blocks, straps, cushions, and appropriate clothing. Comparison of traditional practice (bare floor or cloth mat) with modern Yoga accessories. preparation of a training module for the yoga

Unit 3 Fundamental Principles and Practices of Yoga : Session Structure & Duration: Explanation of a standard Yoga session structure, including warm-up, asanas, pranayama, and meditation/relaxation, duration and sequencing for beginners and advanced practitioners, Types of Practices & Roles: Analysis of different components such as Asanas, Pranayama, Meditation, and Kriyas. Understanding the role of practitioner, instructor, and environment in effective practice. Emphasis on synchronization of breath with movement and awareness, which replaces competitive rules found in sports

Unit 4 Contraindications, Scientific Parameters, and Yogic Systems: Precautions & Contraindications: Categorization of conditions where specific asanas or practices should be avoided, Explanation of safety guidelines and the importance of proper supervision, Physiological & Biomechanical Principles: Scientific analysis of Yoga's effects on the body, Yogic Systems & Practices: Study of integrated practice approaches combining physical, mental, and spiritual elements for overall well-being.

TRACK AND FIELD

Unit 1 History and Development of Track and Field: History and Evolution- From ancient Olympic Games to the modern era, Governance and Structure- Role of World Athletics and national federations, Major competitions (Olympics, World Championships), Classification of Events: Categorization into track events and field events, Information Systems: Introduction to key literature, databases, and resources for athletic, national and international tournaments, and famous players and Important Results (both national and international).

Unit 2 Biomechanical and Physiological Foundations: Physiological Basis of Training - Understanding energy systems (aerobic vs. anaerobic) and their role in different events, Theory of Sports Performance: The structure of athletic performance in running, jumping, and throwing, Biomechanics of Running: Analysis of stride phase, drive phase, and the mechanics of hurdle clearance, Biomechanics of Jumping and Throwing: Force generation, projection, and technique analysis for horizontal/vertical jumps and throwing events

Unit 3 Techniques and Training Methods: Track Events- Training methodologies for sprints, middle-distance, long-distance, hurdle races, and relays, Field Events: Jumps- Detailed technique and training for long jump, high jump, and triple jump, Field Events: Throws- Technique and skill development for shot put, discus, and javelin throw, Practice Organization and Safety: Structuring training sessions and ensuring a safe practice environment

Unit 4 Coaching, Strategy, and Rules: Rules and Officiating: Comprehensive rules of competition for all event categories across different levels, Tactical Approaches: Game strategies for distance running (pace setting) and field events (attempt management), Coach-Athlete Relationship: Psychology of coaching, communication, and building teamwork, Age-Specific Training: Principles of training for youth athletes vs. adults, faults and corrections of major techniques, psychological factors affecting performance, and scientific developmental exercise, modern method of competition analysis.

SUGGESTED READINGS:

1. *Football's Past Revisited edited by Graham Curry (Routledge, 2024)*
2. *Football Facts by Ava Thompson (Publifye, 2025)*
3. *Coaching Football Professionals – Biru Mal – Friends Publications (India)*
4. *Back to the Roots: A Definitive Guide to Grassroots Football Development – Shaji Prabhakaran – Roli Books*
5. *Coaching Cricket – Devendra Balayan – Khel Sahitya Kendra*
6. *Coaching Beyond: My Days with the Indian Cricket Team – R. Sridhar & R. Kaushik – Rupa Publications*
7. *Revised Question Bank on The Laws of Cricket by M. R. Singh (2023)*
8. *The Wisden Book of Cricket Laws by Don Oslear*
9. *Coaching Volleyball Successfully by William J. Neville (USVBA)*
10. *Coaching Youth Volleyball (4th ed.) by American Sport Education Program*
11. *Volleyball – V. K. Sharma – Friends Publications (India)*
12. *Teaching and Coaching Volleyball – S. K. Pahwa – Khel Sahitya Kendra*
13. *Volleyball Skills and Rules – Ramesh Chandra – Sports Publication*
14. *Recall of Basic Skills and Rules (Oak National Academy)*
15. *Badminton Handbook by Bernd-Volker Brahms*
16. *Kho Kho, Author: Dr. Ajay Vasantrao Gulhane & Dr. Amit Arjun, Publisher: Sports Publication, New Delhi*

17. Teaching and Coaching Kho-Kho, Author: S. K. Pahwa, Publisher: Khel Sahitya Kendra, New Delhi
18. Teaching and Coaching Kabaddi, Author: Dr. Ramesh Chandra, Publisher: Sports Publication, New Delhi
19. Kabaddi, Author: C. V. Rao, Publisher: Starling Publication Limited
20. The Sports Book (6th ed.) by Ray Stubbs (DK Publishing, 2024)
21. Light on Yoga – B. K. S. Iyengar – HarperCollins India
22. Asana Pranayama Mudra Bandha – Swami Satyananda Saraswati – Bihar School of Yoga
23. Yoga Education – Dr. Nagendra – Vivekananda Kendra
24. Track and Field, Author: Dr. Vishwajit A. Thakare, Publisher: Laxmi Book Publication
25. Track Athletics (Skills & Tactics), Author: Lokesh Thani, Publisher: Sports Publication, New Delhi
26. Track and Field Athletics, Various Physical Education Authors, Publisher: Khel Sahitya Kendra, New Delhi

Physical Education and Sports

SEMESTER – VII

Course Type – MINOR -7 Course Code: A/PHES/705/MN-7

Course Title: Talent Identification in Sports, Sports Nutrition and Major Game

Total Marks = 50 {Theory Marks: 25: Practical Marks: 15, Internal Assessment: 10}

Contact Hours per week: 5 (3+1 Credits) Examination Duration- 1:15 Hours

COURSE OUTCOMES-

1. *Understand the concept and importance of talent identification in sports.*
2. *Explain methods and models of talent identification.*
3. *Conduct and apply talent identification tests and measurements.*
4. *Analyze factors influencing sports talent.*
5. *Explain basic concepts of nutrition and nutrients.*
6. *Analyse the dietary needs of athletes and physically active individuals.*
7. *Prepare simple balanced diet plans for sports persons.*
8. *Identify nutritional deficiency diseases and preventive measures.*
9. *To learn the basic skills related to the different ball games and also the racket games.*
10. *Improvement of physical attributes along with the mental capacity of an individual leading towards the ultimate goal of overall development.*
11. *To enhance the neuro-muscular coordination along with other physical factors.*
12. *To learn about the rules and regulation of different ball and racket games.*

THEORY PART: (Total Marks - 25)

UNIT - I INTRODUCTION TO *TALENT IDENTIFICATION IN SPORTS*

1.1 Meaning, definition, aim, Objectives and Importance of Talent Identification in Sports,
1.2 Factors influencing Sports talent - Physical, Physiological, Psychological factors, Genetic and environmental factors
1.3 Difference between Talent Identification, Talent Selection and Talent Development
1.4 Role of schools, colleges, Universities and sports organizations in identifying talent

UNIT – II *METHODS AND TESTS AND CHALLENGES FOR TALENT IDENTIFICATION*

2.1 Scientific approaches to talent identification. Anthropometric measurements (height, arm span, leg length, etc.)
2.2 Physical fitness tests for identifying talent. Skill-based testing methods
2.3 Use of sports science and technology in talent identification
2.4 Problems and challenges in talent identification, Strategies for improving talent identification systems

UNIT -III *FUNDAMENTALS OF NUTRITION*

3.1 Concept and definition of nutrition, Classification of nutrients
3.2 Importance of nutrition in sports performance
3.3 Macronutrients and micronutrients, Food groups and nutrients
3.4 Functions of carbohydrates, proteins and fats, Vitamins and minerals, Water and electrolyte balance, fibre and phytonutrients.

UNIT - IV *SPORTS NUTRITION AND DIET PLANNING FOR ATHLETES*

3.1 Importance of nutrition in sports, Diet before, during and after competition
3.2 Ergogenic aids and supplements, Concept and Principle of balanced diet, Components of balanced diet
3.3 Steps of energy supply from different type of nutrients carbohydrate fat and protein in sports
3.4 Hydration and dehydration in sports, Food safety and hygiene, Protein supplements and energy drinks

PRACTICAL PART: (Total Marks -15) (Preparation of Record Book is Compulsory which will be evaluated by both Internal and External Examiners)

BALL GAME AND RACKET SPORTS (ANY ONE)

FOOTBALL

1. Kicking Skills : Instep kick, Inside kick, Lofted kick (Half volley and Full volley) in-swing and out-swing kicks.
2. Receiving Skills: With Sole of the foot, Inside and Outside of the foot, with Thigh and Chest.
3. Dribbling: Inside dribbling, Outside dribbling and Zig-zag dribbling.
4. Heading: Standing and Jumping and Throw-in: In Standing and in Running Condition
5. Goal keeping – Static and Dynamics Condition
6. Game practice and practical knowledge of rules and regulations.

VOLLEYBALL

1. Service: Under arm service, Over Head service, Side arm service, Floating service
2. Pass: Under Arm Pass, Over Head Pass
3. Spiking and Blocking, Rotation and Movement of Libero
4. Game practice with practical knowledge rules and regulations

CRICKET

1. Batting skill: The basic elements - The grip, The stance & the back lift.
2. Basic Shots and Techniques: The front foot defence, Front foot drive off and on side, Back foot defence, Back foot drive off and on side, Pull shot, Square Cut shot.
3. Bowling skills: Grip, Approach Run, Delivery Style and Follow Through, Out-swing, In-swing, Leg spin, Off spin.
4. Fielding and catching: collection of ball, throwing, defensive and offensive fielding, different types of catching
5. Game practice with application of Rules and Regulations;

BADMINTON

1. Racket parts, Racket grips, Shuttle grip
2. Service: Short service, Long service, Long high service
3. Shots: Over head shot, Defensive clear shot, Attacking clear shot, Drop shot, Smash.
4. Game practice with practical knowledge of rules and regulations.

IINDIAN GAME AND GYMNASTICS (ANY ONE)

KABADDI

1. Raiding Skills: Touching with hands, Use of Leg, toe touch, squat leg thrust, side kick, mule kick, arrow fly kick, crossing of baulk line, crossing the bonus line.
2. Holding Skills: Wrist, Hand and Waist Catch. Techniques of various chain formation.
3. Additional Skills in Raiding: Escaping Techniques from various holds, techniques of escaping from various chain formations.
4.Game practice with Practical Knowledge of rules and regulations.

KHO- KHO

1. Skills in Chasing: Sit on the box (parallel & Bullet toe methods), Get up from the box (proximal & Distal foot method), Give Kho (Simple, early, late and judgment), Tiger Jump, Pole turn, pole drive, Trapping, Hammering, Rectification of foul.
2. Skills in Running: Chain play, Ring play, Ring play and chain & ring mixed play.
3. Game Practice with practical knowledge of rules and regulations.

GYMNASTICS

1. Roll in Acro Skill: Forward Roll, Backwards Roll, Sideways Roll, Dive Roll, Hand Stand Followed by Roll
2. Static Pose in Gymnastics: T- Balance, Frog Balance, Forward Split, Arching/ Bridge, Headstand
3. Basic Acro Skill: Round Off, Cartwheel, Front Walkover, Hand Spring, Head Spring, Neck Spring, Somersault

QUESTION PATTERN

END SEMESTER EXAMINATION Descriptive Type				Internal Marks	Prac. Marks	Total Marks
NUMBER OF QUESTIONS TO BE ANSWERED			TOTAL			
01 Mark Question	05 Marks Question	10 Marks Question				
5 Out of 8	2 Out of 4	1 Out of 2	25	10	15	50
01X5 = 05	05X2 = 10	10X1 = 10				

Guideline for Record Book – Content of Record Book- History, Major Rules Regulation, National and International level Tournament, Name of famous National and International Players, Major Skill (Fundamentals with Picture).

SUGGESTED READINGS:

1. *Talent Identification and Development, Author: Dr. Ajmer Singh, Publisher: Kalyani Publishers*
2. *Talent Identification in Sports, Author: Dr. B. P. Singh, Publisher: Friends Publications (India)*
3. *Identification and Development of Sports Talent, Author: Dr. P. K. Nayak, Publisher: Khel Sahitya Kendra*
4. *Sports Talent Identification, Author: Dr. V. K. Sharma, Publisher: Friends Publications (India)*
5. *Benardot, D. Advanced Sports Nutrition. Human Kinetics.*
6. *Burke, L., & Deakin, V. Clinical Sports Nutrition. McGraw-Hill.*

7. *Maughan, R., & Burke, L. Sports Nutrition. Wiley-Blackwell.*
8. *Mudambi, S., & Rajagopal, M. V. Fundamentals of Foods and Nutrition. New Age International.*
9. *Srilakshmi, B. Nutrition Science. New Age International.*
10. *Dietary Guidelines for Indians. National Institute of Nutrition.*
11. *Indian Food Composition Tables. National Institute of Nutrition*