

DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS SCIENCES

UNIVERSITY OF DELHI

B.Sc. (Hons.) (Physical Education, Health Education and Sports)

SEMESTER- V

BSc-PE-DSC-13(4): ORGANISATION AND ADMINISTRATION IN PHYSICAL EDUCATION AND SPORTS

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
BSc-PE-DSC-13(4): ORGANISATION AND ADMINISTRATION IN PHYSICAL EDUCATION AND SPORTS	4	3	1	0	Class XII pass	Nil

Learning Objective: -The learner will acquire knowledge and understanding with applications and skills in **Organisation and Administration in Physical Education and Sports** in real-life situations.

Learning Outcomes: After completing the course, the students will be able to:

1. Understand the scope and importance of Organisation and Administration in physical education and sports,
2. Follow the responsibilities of the Physical Education teacher and pupil leader.
3. Acquire knowledge about Components of Organizations and Administration.
4. Create a budget by acquiring knowledge of **budget-making**
5. Maintain Records and Registers of Budgets
6. Manage Sports Facilities & Equipment
7. Organize Competitions, extra-murals, intra-murals, and athletic meets

THEORY SYLLABUS (45 hours)

Unit – I: Introduction to Organisation and Administration & Organisation Structure in Sports (15 Hours)

- 1.1 Meaning, Scope, and importance of Organisation and Administration in physical education and sports
- 1.2 Qualification and Responsibilities of Physical Education teacher and pupil leader
- 1.3 Analysis of Sports organisations (Local, National, International)
- 1.4 Governing Bodies and Their Functions

1.5 Club structure and affiliation & Steps to Develop Academy/Club/ Coaching Centers.

UNIT- II: Budget Making and Maintenance of Records and Registers (10 Hours)

2.1 Budget: Meaning, Importance of Budget Making,

2.2 Criteria of a good Budget, Sources of Income, Expenditure, Preparation of Budget for Sports Organizations.

2.3 Records and Registers: Maintenance of attendance Register, stock register, cash register, and physical efficiency record.

UNIT-III: Management of Sports Facilities & Equipment Management (10 Hours)

3.1 Facilities and equipment management: Types of facilities, infrastructure-indoor, outdoor

3.2 Care of school building, Gymnasium, swimming pool, Play fields, Playgrounds

3.3 Equipment: Determining supply and equipment; Guidelines for Purchasing supply of equipment; Store Keeping; Care and maintenance.

UNIT-IV: Competition Organisation (10 Hours)

4.1 Importance and Types of Tournaments

4.2 Organization Structure of Athletic Meet

4.3 Sports Event- Intramurals & Extramural Tournament planning

SUGGESTED READING

1. Broyles, F. J. & Rober, H. D. (1979). Administration of sports, Athletic program: A Managerial Approach. New York: Prentice Hall Inc.

2. Bucher, C. A. (1983). Administration of Physical Education and Athletic program. St. Louis: The C.V.

3. Hosby Co. Kozman, H.C. Cassidy, R. & Jackson, C. (1960). Methods in Physical Education. London: W.B. Saunders Co. Pandy, L.K. (1977).

4. Gyanodayal Press. Tirunarayanan, C. & Hariharan, S. (1969). Organization & administration of Physical Education. Madras:

5. Voltmer, E. F. & Esslinger, A. A. (1979). Methods in Physical Education. Karaikudi: South India Press.

6. The organization and administration of Physical Education. New York: Prentice Hall Inc

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

Semester-V

B.Sc-PE-DSC 14(4): FUNDAMENTALS OF SPORTS NUTRITION

Course title& Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
B.Sc-PE-DSC 14(4): FUNDAMENTALS OF SPORTS NUTRITION	4	3	1	0	Class XII pass	NIL

Learning Outcome: - The student would be able to apply the knowledge of nutrition in day-to-day life and sports and training. Such core knowledge and skills help to create a strong foundation to engage human subjects of all ages, sexes, and abilities.

Learning Outcomes: After completing the course, the students will be able to:

1. Understand nutrition & nutrients, the significance of their sources & function requirements in normal health conditions
2. Acquire knowledge about Energy metabolism, RMR, energy expended on physical activity, and TEF.
3. Understand the Concept of a balanced diet, dietary and nutritional requirements for children, adolescents, adult men and women, and elderly
4. Consider Nutrition for sports/exercising person during training, pre-event meal, during event and post-event meal.
5. Understand Fluid requirements in sports
6. Understand eating disorders in Sports Persons, Female athletic triad, and Sports anemia
7. Identify Nutrients as ergogenic aids for sports and exercise, Supplements, and their role in sports.

THEORY SYLLABUS: 45 Credits

UNIT-I (12 Hours)

1.1 Introduction to basic concepts in nutrition-Nutrients of physiological significance their sources & functions,

1.2 Basic food groups, Concept of a balanced diet.

1.3 Nutritional requirements- Introduction to Estimated Energy Requirements (EAR) and Recommended Dietary Allowances for Indians (RDA). Concept of Tolerable Upper Limit.

1.4 Basic Dietary Guidelines for Indians for good health and prevention of diseases.

UNIT II (7Hours)

2.1 Energy Metabolism- Definition, catabolic and anabolic reactions.

2.2 Energy components of Energy Expenditure-BMR, RMR, Energy Expended on Physical Activity, and TEF.

2.3 Energy requirements of specific groups, Energy cost of activities, Energy systems used in different sports, Energy substrate for activities of different intensity and duration;

2.4 Concept of energy balance in maintaining body weight.

UNIT-III (12 Hours)

3.1 General and specific dietary guidelines in planning meals for children, adolescents, adult men and women and the elderly.

3.2 Nutritional and dietary modifications for body weight and body composition management

3.2 Nutritional considerations for sports/exercising person(endurance and strength sports/exercise training) during training, and competition including pre-event meals, during the event, and post-event meal.

UNIT-IV (14Hours)

4.1 Importance of hydration and fluid balance in physical activity and sports, Symptoms, and prevention of dehydration, Types of sports drinks - Hypotonic, Isotonic, and Hypertonic drinks.

4.2 Nutrition-related problems in sports persons- Eating disorders, Sports anaemia, Female athletic triad (FAT) Relative energy deficiency syndrome (RED-S) and

4.3 Nutrients as supplements and ergogenic aids for sports and exercise

SUGGESTED READINGS

1. Antoni, J. et al, Editors (2008). Essentials of Sports Nutrition and Supplements. Humana Press, USA.
2. Benardot, D. (2005). Advanced Sports Nutrition. Human Kinetics, USA.
3. Clark, N. (2008). Sports Nutrition. 4th Ed. Human Kinetics, USA.
4. Dietary Guidelines for Indians (2024). ICMR/NIN Publication
5. Eberle, S.G. (2007). Endurance Sports Nutrition. Human Kinetics, USA.
6. Finic HH et al (2006), Practical Applications in Sports Nutrition J & B Publisher, USA.
7. ILSI- India, NIN, SAI. (2007) Nutrition and hydration Guidelines for excellence in sports performance;
8. Lal PR (2009) Handbook of Sports Nutrition, Friends Publication

9. R, Chadha *and* P. Mathur.(2015) Nutrition: A Lifecycle Approach. ISBN-13: 978-8125059301. The Orient Blackswan. Co.
10. McArdle, W.d. & Katch, V.L. (2008). Sports and Exercise Nutrition. 3rd Ed. Lippincott Williams and Wilkins, USA.
11. Meyer, D.E.L. (2006). Vegetarian Sports Nutrition. Human Kinetics Publishers, USA.
12. Whitney E. and Rolfes S.R. (2005). Understanding Nutrition. Thomson Wadsworth. Belmont. California. U.S.A

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SEMESTER-V

BSc-PE-DSC-15 (4): ATHLETE CARE AND REHABILITATION

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
BSc-PE-DSC-15 (4): ATHLETE CARE AND REHABILITATION	4	3	0	1	Class XII pass	NIL

Learning Objective:-To acquaint students with the knowledge of Athletic Care and Rehabilitation application.

Learning Outcomes: After completing the course, the students will be able to:

1. Apply training principles in developing various exercise programs and improving sports performances.
2. Understand the concept of ACR/SM.
3. Understand the Principles of care and rehabilitation and the Role of physical educators in athletic care and Rehabilitation
4. Learn about sports injuries
5. Classify sports injuries with their causes and reasons
6. Prevent And Manage Sports Injuries
7. Identify the Risk Factors of Sports Injuries
8. Rehabilitate and provide First Aid and Safety Procedures in Playfield and Gym
9. Manage of sports specific injuries
10. Prevent and Manage Health issues in different climatic conditions.
11. Apply CPR (Cardio Pulmonary Resuscitation) and First Aid for Soft tissue, bone & joint injuries
12. Apply Exercise therapy in rehabilitation

THEORY SYLLABUS: 45 HOURS

UNIT-I: INTRODUCTION (9 HOURS)

1.1 Meaning and definition of related terminologies- Athlete, fitness, wellness, performance, Care, Rehabilitation, Sports, Medicine, Sports Medicine

1.2 Aim, objectives and scope of ACR/SM

- 1.3 Principles of care and rehabilitation
- 1.4 Role of physical educators in athletic care and Rehabilitation

UNIT- II: SPORTS INJURIES (8 HOURS)

- 2.1 Introduction, meaning and definition
- 2.2 Various classifications of sports injuries
- 2.3 Causes and Reasons of Sports Injuries

UNIT-III PREVENTION AND MANAGEMENT OF SPORTS INJURIES (10 HOURS)

- 3.1 Importance of Prevention of Sports Injuries
- 3.2 Identification of Risk Factors of Sports Injuries
- 3.3 Steps for Preventing Sports Injuries – Training Strategies and Equipment Recommendations
- 3.4 Introduction to Rehabilitation Modalities and First Aid. Exercise therapy in rehabilitation
- 3.5 Safety Procedures in Playfield and Gym

UNIT- IV MANAGEMENT OF SPORTS-SPECIFIC INJURIES

- 4.1 Sports-specific injuries- acute and chronic, with special emphasis on the specific risk factors, prevention, and management of various sporting events-
 - a. Individual events: Field & Track Events
 - b. Team events: Hockey, Cricket, and Football
 - c. Combat sports
 - d. Water sports
- 4.2 Prevention and management of Health issues in different climatic conditions: Heat-related injuries – Heat stroke, Heat exhaustion & cold related injuries – Frostbite – Hypothermia – Altitude Sickness.

PRACTICALS (30 HOURS)

CPR (Cardio Pulmonary Resuscitation) and First Aid for Soft tissue, bone & joint injuries

1. Therapeutic Modalities, Principles, and Equipment used for
 - Cryotherapy
 - Thermotherapy
 - Electrotherapy
 - Hydrotherapy
 - Massage

2. Exercise therapy
 - Isometric exercise
 - Isotonic exercise

SUGGESTED READINGS-

- Jain, Rachna, (2002) Sports Medicine, New Delhi: Khel Sahitya Kendra,.
- Vijay Ed., (2001) Hand book of Sports Medicine, Delhi: Friends Pub.
- Shaw, D. (2021). Athletic care and rehabilitation. Friends publications.

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