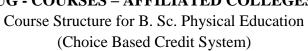
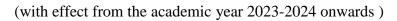


# MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI-12

# **SYLLABUS**

# **UG - COURSES – AFFILIATED COLLEGES**







Semester-VI							
Part	Subject Status	Subject Title	Subject Code	Credit			
III	CORE	CARE, PREVENTION OF		4			
		ATHLETIC INJURIES AND					
		REHABILITATION					
III	CORE	THEORIES OF MAJOR GAMES - III		4			
		(CRICKET, BASKETBALL,					
		VOLLEYBALL, FOOTBALL AND					
		HOCKEY)					
III	CORE	RESEARCH AND ELEMENTARY		1			
		STATISTICS	4				
III	ELECTIVE	MAJOR GAMES - III (CRICKET,					
		BASKETBALL, VOLLEYBALL,		3			
		FOOTBALL AND HOCKEY) (Practical)					
III	ELECTIVE	PROJECT		3			
IV	NAAN MUDHALVAN	SPORTS TECHNOLOGY *		2			
		EXTENSION ACTIVITY		1			



#### Total Marks: 100 Internal Exam: 25 marks + External Exam: 75 marks

#### A. Scheme for internal Assessment:

Maximum marks for written test: 20 marks

**3 internal tests**, each of **I hour** duration shall be conducted every semester.

To the average of the **best two** written examinations must be added the marks scored in. The **assignment** for 5 marks.

The break up for internal assessment shall be:

Written test- 20 marks; Assignment -5 marks Total - 25 marks

#### **B.** Scheme of External Examination

**3 hrs.** examination at the end of the semester

A-Part: 1 mark question two - from each unit B-Part: 5 marks question one - from each unit C-Part: 8 marks question one - from each unit

#### Conversion of Marks into Grade Points and Letter Grades

S.No	Marks	Letter Grade	Grade point (GP)	Performance
1	90-100	O	10	Outstanding
2	80-89	A+	9	Excellent
3	70-79	A	8	Very Good
4	60-69	B+	7	Good
5	50-59	В	6	Above Average
6	40-49	С	5	Pass
7	0-39	RA	-	Reappear
8	0	AA	-	Absent

# **Cumulative Grade Point Average (CGPA)**

$$CGPA = \frac{\Sigma (GP \times C)}{\Sigma C}$$

- **GP** = Grade point, **C** = Credit
- CGPA is calculated only for Part-III courses
- CGPA for a semester is awarded on cumulative basis

#### > Classification

a) First Class with Distinction
b) First Class
c CGPA ≥ 7.5\*
c CGPA ≥ 6.0

c) Second Class :  $CGPA \ge 5.0$  and < 6.0

d) Third Class : CGPA < 5.0



# CARE, PREVENTION OF ATHLETIC INJURIES AND REHABILITATION

# **Learning outcomes:**

- Understand the Prevention, Treatment and Rehabilitation of Athletic Injuries
- To learn them to deal with injuries, therapeutic modes.
- To educate the importance and principles of sports medicine.
- To understand the knowledge of basic rehabilitation.
- To identify the head, neck, and spine injuries and its exercise.

#### Unit-I

i. Types of Movements, Concentric, exocentric(Isotonic), Static(Isometric) and Isokinetic exercises. Posture and body mechanics—Standards of Standing posture, values of good posture, draw back and causes of poor posture.

#### **Unit-II**

- i. Posture Tests–Examination of the spine. New York State posture Rating Chart Test, Organization of special classes for postural correction.
- ii. Some common deviation in posture–normal curvature of the spine and its utility, kyphosis, lordosis, kypholordosis, flatback, scolosis (C and S curve, functional and structural round shoulders). Knock knees, bowlegs, flatfoot, causes for these deviations and treatment including exercise.

#### **Unit-III**

- i. A brief history of massage and remedial exercise5
- ii. Muscle relaxation as Anaid to massage
- iii. Points to be considered in giving massage
- iv. Physiological effects of massage
- v. Classification of the manipulations used in massage and their specific uses on the Human body a stroking manipulation.
- vi. Effleurage, Stroking, Kneading, Friction, Hacking, Clapping, Beating and Pounding.

#### **Unit-IV**

- i. Common athletic injuries and their treatment
- ii. Sprains
- iii. Strains
- iv. Contusions
- v. Abrasions
- vi. Type of fractures and their management



#### **Unit-V**

Principles of applying heat/cold, ultra-violet rays, infra-red rays, contrast bath ultra sonic

#### **Book for References:**

- 1. Corrective Physical Education, Rathborne J.I.W.B. Saunders and co., London 1995. Manual of massage and movement, Prof E.M.Naro Faber and Faber Ltd.
- 2. The rapeutic Exercise for body Alignment and Education, by Williammareuam and Catherine Worthingham, WB. Saunders and Co., 1965
- 3. Massage and Medical Gymnastics, M.V. Lace J. & A.Churchill Ltd., 1951.
- 4. Preventive and Corrective Physical Education Stafford and Kelly, NewYork. The Ronald Press, 1968.

# THEORIES OF MAJOR GAMES - III (CRICKET, BASKETBALL, VOLLEYBALL, FOOTBALL AND HOCKEY)

# **Learning outcomes:**

- To acquire practical knowledge in Basketball, Cricket, Hockey
- To learn skills and tactics in Basketball, Cricket, Hockey
- To practice in advanced skills in Basketball, Cricket, Hockey &
- To understand the strategic in Basketball, Cricket, Hockey

#### Unit-I

History of the Games: World, India - Organizational Chart (Working Federation): World, Asia, India, State – Major Competitions – Talent identification.

#### **Unit-II**

Fundamental Skills: Types, Drills and Lead-up activities to develop skills – Scientific principles applied in sports and games.

#### **Unit-III**

Meaning and definition of Tactics and Strategy - Systems of Play - Aspects of coaching, Leadup Games, evaluation - pre and post-match preparation.

#### **Unit-IV**

Warm-up, Cool-down, Factors influencing performance, Fitness components, Exercises and training methods to develop fitness.

#### **Unit-V**

Rules and their Interpretations - Method of officiating and Scoring - Layout and Maintenance of play fields.



#### **Books for References:**

- 1. Tyson, F. (1985). The Cricket Coaching Manual. Victorian Cricket Association.
- 2. Mohinder, A., (1950). Learn to Play Good Cricket.New Delhi: Surject publications.
- 3. Dhanraj V. Hubert. (1971). Volleyball: A modern approach.Patiala: SAINSNIS.
- 4. Larche, & Harry, F, (1969). Techniques to Football Coaching. London: A.S. Barnes and company.
- 5. Horat, W., (1970). The Science of Hockey. London: Pelham Books.
- 6. Milford, D. S. (1949). Hockey Practice and Tactics, London Mnolds and Company.
- 7. Colberk, A.L. Modern Basketball A Fundamental Analysis of Skills and Tactics. London, NicholesKayl

# RESEARCH AND ELEMENTARY STATISTICS

### **Learning outcomes**

- Demonstrate knowledge of statistics and the terms like data, papulation and sample.
- Demonstrate knowledge of descriptive statistical methods and normal curve.
- Demonstrate knowledge of the properties of scales and graphs.
- Demonstrate the ability to perform data analysis.

#### Unit-I

#### INTRODUCTION

Definition for Research–Need, importance and scope of research in Physical Education–Basic research–Applied research.

#### Unit-II

#### FORMULATION AND DEVELOPMENT OF RESEARCH PROBLEM

Location of research problem—Criteria ins electing the research problem—Hypothesis—Research proposal.

#### Unit-III

#### HISTORICAL RESEARCH

Definition of Historical research—Steps in historical research—Sources of Historical data-primary and secondary sources of data—Historical criticism and internal.

#### Unit-IV

#### INTRODUCTION TO STATISTICS

Meaning and Definition of Statistics, Nature, Need for and Importance of Statistics, Types of Statistics - Data: Quantitative and Qualitative data



#### Unit-V

#### MEASURE OF CENTRAL TENDENCY

Frequency Distribution – Measure of Central Tendency, Mean, Median and Mode Definition- Computation of mean, median and mode from the ungrouped data - Specific characteristics and use of measure of Measure of Central Tendency

#### **Books for References:**

- 1. David, C. H., & Clarke, H. H., (1984). Research Processes in Physical Education, Eaglewood Cliffs: Prentice Hall INC.
- 2. Gupta, (1982). Advanced Practical Statistics, New Delhi: S.S Chand & Co.
- 3. Wilks, S.S., (1984). Elementary Statical Analysis. Calcutta: Deford& IBH publishing Co., Calcutta.
- 4. Karikalan, I., (2017). Elementary statistics in Physical Education. Shree Publications, Tuticorin

# ELECTIVE – VII - PRACTICAL - XII: MAJOR GAMES-III (CRICKET, BASKETBALL, VOLLEYBALL, FOOTBALL AND HOCKEY)

# **Learning outcomes:**

- To acquire practical knowledge on games
- To obtain the experience in Skills, strategy, tactics and advance skills.

#### Unit-I

General and Specific Conditioning Exercises

#### **Unit-II**

Fundamental Skills (Offensive Skills, Defensive Skills)

#### **Unit-III**

**Techniques and Tactics** 

#### **Unit-IV**

Lead up games and System of Play

#### **Unit-V**

Method of Officiating Play field, Equipment specifications and Scoring

#### **Books for References:**

- 1. Dr.Anil Sharma O.P.Sharma. Rules of games, sports publication, An sari Road New Delhi.
- 2. Dr.P.Mariayyah. Sports & Games, Sports Publication Raja Street, Coimbatore.
- 3. Rao C.V. (1971). Kabaddi. Patiala NIS Publication.
- 4. Monika, A., 2005, "Kabaddi", Sports Publications, First edition, New Delhi
- 5. Thakur, J.K., 2013 "Measurement of Playing Field", Sports Publications, New Delhi



# **PROJECT**

Students will visit the districts of the state to do survey on availability of sports infra-structure in concerned schools (or) Observe the tournaments conducted at District, State, National and University level and submit an individual project report and will be assessed by a viva voce for 2credits.

# NAAN MUDHALVAN / SPORTS TECHNOLOGY

#### **Learning outcomes:**

- Understand the fundamental concepts of technology using in Sports
- Understand the science of sports materials used in sports and games
- To attain the knowledge of playfield surface
- To discuss about various modern equipment
- To elaborate on the steps and stages of training gadgets

#### **Unit-I**

Importance of technology in Sports: 9 Meaning, Definition - General Principles and purpose of instrumentation in sports - Technological impacts on sports.

#### **Unit-II**

Science of Sports Materials: 9 Adhesives - Nano glue - Nano Moulding Technology - Nano turf - Foot wear production - Factors and applications in sports - Constraints - Foams - Polyurethane - Polystyrene - Styrofoam - closed cell and open-cell foams - Neoprene - Foam - Smart Materials: Shape Memory Alloy (SMA) - Thermo chromic film - High - density modeling foam.

#### **Unit-III**

Surfaces of Playfields: 9 Modern surfaces for playfields - Construction and installation of sports surfaces - Types of materials: synthetic, wood, polyurethane - Artificial turf - Modern technology in the construction of indoor and outdoor facilities - Use of computer and software in Match Analysis and Coaching.

#### **Unit-IV**

Modern Equipment's: 9 Playing Equipment's - Balls: Types, Materials and Advantages - Bat / Stick / Racquets: Types, Materials and Advantages - Clothing and shoes: Types, Materials and Advantages - Measuring equipment's: Running, Throwing and Jumping Events - Protective Equipment: Types, Materials and Advantages - Sports equipment with Nano technology and Advantages.



#### **Unit-V**

Training Gadgets: 9 Basketball: Ball Feeder - Mechanism and Advantages; Cricket: Bowling Machine - Mechanism and Advantages; Tennis: Serving Machine - Mechanism and Advantages; Volleyball: Serving Machine - Mechanism and Advantages; Lighting Facilities: Method of erecting Flood Light and measuring luminous; Video Coverage: Types, Size, Capacity; Place and Position of Camera in Live coverage of sporting events; Use of computer and software in mater analysis and coaching

#### **Book for References:**

- 1. Brar, R.S. et al. Teaching Methodology and Educational Technology in Physical Education, Kalyani Publisher: New Delhi, 2008.
- 2. Bosco, James S. "Sports Technology", New Jersy, Prentice Hall Inc., 1983.
- 3. Hoover, Kenneth H. The Professional Teacher"s Handbook, Boston, Allyn and Bacoon, 1972.
- 4. Krik, David. Physical Education and Curriculum Study, Kent, Croom Helm, 1988.
- 5. Mohanty, J. Educational Technology, New Delhi, 1992.

# **EXTENSION ACTIVITY**

NCC, NSS, YRC, RRC, Sports and Games

