

DEBRA THANA SAHID KSHUDIRAM SMRITI MAHAVIDYALAYA (AUTONOMOUS)

Chakshyampur, Debra, West Bengal



PROPOSED CURRICULUM AND SYLLABUS OF

BACHELOR OF ARTS WITH PHYSICAL EDUCATION (MULTIDISCIPLINARY STUDIES)

3-YEAR UNDERGRADUATE PROGRAMME
(w.e.f Academic Year 2024-2025)

Based on

**Curriculum & Credit Framework for Undergraduate
Programmes**
(CCFUP), 2024 & NEP, 2020

VIDYASAGAR UNIVERSITY
BACHELOR OF ARTS IN SOCIAL SCIENCE with PHYSICAL EDUCATION
(Under CCFUP, 2023)

Level	YR.	SEM	Course Type	Course Code	Course Title	Credit	L-T-P	Marks					
								CA	ESE	TOTAL			
B.A. in Humanities with Physical Education	2 nd	III	SEMESTER-III										
			Major-A2	PEDPMJ02	T: Management of Physical Education and Sports: P: Practical <i>(To be studied by students taken Physical Education as Discipline- A)</i>			4	3-0-1	15	60	75	
			Major-A3	PEDPMJ03	T: Anatomy, Physiology and Exercise Physiology; P: Practical <i>(To be studied by students taken Physical Education as Discipline- A)</i>			4	3-0-1	15	60	75	
			SEC	SEC03	<i>To be taken from SEC-03 of Discipline C.</i>			3	0-0-3	10	40	50	
			AEC	AEC03	Communicative English-2 <i>(common for all programmes)</i>			2	2-0-0	10	40	50	
			MDC	MDC03	Multidisciplinary Course-3 <i>(to be chosen from the list)</i>			3	3-0-0	10	40	50	
			Minor-3 (Disc.-C3)	PEDMIN03	T: Anatomy, Physiology and Exercise Physiology <i>(To be studied by students taken Physical Education as Discipline- C)</i>			4	3-0-1	15	60	75	
		Semester-III Total						20				375	
		IV	SEMESTER-IV										
			Major-B2		T: Management of Physical Education and Sports: P: Practical <i>(To be studied by students taken Physical Education as Discipline- B)</i>			4	3-0-1	15	60	75	
			Major-B3		T: Anatomy, Physiology and Exercise Physiology; P: Practical <i>(To be studied by students taken Physical Education as Discipline- B)</i>			4	3-0-1	15	60	75	
			Major (Elective) -1	PEDMJE-01	Field Practical <i>(To be studied by students taken Physical Education as Discipline- A)</i>			4	0-0-4	15	60	75	
			AEC	AEC04	MIL-2 <i>(common for all programmes)</i>			2	2-0-0	10	40	50	
			Minor -4 (Disc.-C4)	PEDMIN04	T: Health Education, First-aid and Physical Fitness <i>(To be studied by students taken Physical Education as Discipline- C)</i>			4	3-0-1	15	60	75	
			Summer Intern.	IA	Internship / Apprenticeship- activities to be decided by the Colleges following the guidelines to be given later			4	0-0-4	-	-	50	
		Semester-IV Total						22				400	
		TOTAL of YEAR-2						42	-	-	-	775	

MJP = Major Programme (Multidisciplinary), MI = Minor, A/B = Choice of Major Discipline; C= Choice of Minor Discipline; SEC = Skill Enhancement Course, AEC = Ability Enhancement Course, MDC = Multidisciplinary Course, CA= Continuous Assessment, ESE= End Semester Examination, T = Theory, P= Practical, L-T-P = Lecture-Tutorial-Practical, MIL = Modern Indian Language

MAJOR (MJ)

Major A2: Management of Physical Education and Sports

Credits 04 (FM: 75)

A2T: Management of Physical Education and Sports

Credits 03

Course Contents:

Unit I: Introduction to Management in Physical Education and Sports

- 1.1. Management in Physical Education and Sports: Meaning, Definition, aim and objectives, Nature and Scope
- 1.2. History and importance of Sports Management. Principles of Management in Physical Education and Sports
- 1.3. Qualities, Duties and Responsibilities of a Manager in Physical Education and Sports
- 1.4. Leadership: Definition, Types and Principles; Qualities of a Good Leader in Physical Education and Sports

Unit II: Tournaments

- 2.1. Tournaments: Meaning, Definition and Types; Knock-out, League, Combination and Challenge
- 2.2. Organisation: Fixture Drawing Procedure of Knock-out, League and Combination Tournaments
- 2.3. Annual Programme: Athletic Meet and Play Day Organisation and Management
- 2.4. Year-round Programme: Organising and Benefits of Intramural and Extramural Competition

Unit III: Facilities and Equipment

- 3.1. Structure and Functions of S.A.I., University Sports Council and A.I.U.
- 3.2. Care and Maintenance: Meaning, Methods, Need and Importance of Sports Equipment Field; Playground, Gymnasium and Swimming Pool. Documentation: Meaning. Methods, Need and Importance
- 3.3. Time Table: Meaning, Definition, Importance and Factors Affecting
- 3.4. Purchase: List of Consumable and Non-consumable sports goods and equipment in the department of Physical Education, Procedure to purchase sports goods and equipment in the department of Physical Education, stock entry, storing and distribution

Unit IV: Budget and Sponsorship

- 4.1. Financial Management: Meaning, Definition, Need and Importance
- 4.2. Budget: Meaning, Definition, Criteria, Principles; Steps for Preparing a Good Budget
- 4.3. Sponsorship: Meaning, Trends, Process, Aim and Objectives
- 4.4 Sports Promotion: Meaning, Means and Methods; Funding Agencies -Types, Procedure of Communication with the Agencies

KHO-KHO

Marks:10

Fundamental Skills:

- a) Chasing Skills: Sitting on the box-Parallel and Bullet Toe Method; Getting up from the Box Proximal and Distal Foot Method; Giving Kho- Simple, Early, Late and Judgment Kho; Pole Turn, Pole Diving, Tapping, Hammering, Rectification of Foul
- b) Running Skills: Chain Play, Ring Play, Chain, Ring Mixed Play, Running Zigzag, Avoiding and Dodging.
- c) Game Practice with Application of Rules and Regulations
- d) Rules and their Interpretations and Duties of the Officials
- e) Layout of the Kho-Kho Court

KABADDI

Marks:10

Fundamental Skills:

- a) Raiding Skills: Cant, Touching with Hands, Use of Leg-Toe Touch, Squat Leg Thrust, Side Kick, Mule Kick, Arrow Flying Kick, Roll Back; Crossing of Baulk Line; Crossing of Bonus Line
Additional Raiding Skills: Escaping from Various Holds, Techniques of Escaping from Chain Formation, Offense and Defense
- b) Holding Skills: Ankle, Knee, Thigh, Wrist, Crocodile and Washer Man Hold; Formation During Holding: Various Formations, Catching from Particular Position
- c) Rules and their Interpretations and Duties of the Officials
- d) Game Practice with the Application of Rules and Regulations
- e) Layout of the Kabaddi Court

Suggested Readings:

- 1. Broyles, F. J. & Robert, H. D. Administration of Sports, Athletic Programme: A Managerial Approach. New York: Prentice Hall Inc.
- 2. Bucher, C. A. Administration of Physical Education and Athletic Programme. St. Louis: The C.V. Mosby Co.
- 3. Thomas, J. P. Organization & Administration of Physical Education. Madras: Gyanodayal Press
- 4. Nanda, S.M. Sports Management, Friend Publications, New Delhi
- 5. Paul, A. Sarirshikshay Management, Classic Publishers, Kolkata
- 6. Kar, S. & B. A.K. Sishoy Sarirshiksha. Clasiqne Books. Kolkata
- 7. Bandopadhyay, K. Sarir Siksha Parichay, Clasiqne Books, Kolkata
- 8. Tyagi Arun Kumar, Gymnastics: Skills and Rules, Khel Sahitya Kendra, New Delhi
- 9. Dubey, H.C. Gymnastics, Discovery Publishing House, New Delhi
- 10. Saha, A. K. Sarir Siksher Ritiniti, Rana Publishing House, Kalyani
- 11. Swami Satyananda Saraswati, Asana Pranayama Mudra Bandha. Yoga Publications Trust, Munger
- 12. Swami Satyananda Saraswati, Suranamaskara. Yoga Publications Trust, Munger

Major A3: Anatomy, Physiology and Exercise Physiology

Credits 04 (FM: 75) Major

A3T: Anatomy, Physiology and Exercise Physiology

Credits 03

Course Contents:

Unit I: Introduction of Anatomy, Physiology and Exercise Physiology

- 1.1. Anatomy, Physiology and Exercise Physiology: Meaning, Definition, Scope and Importance; Role of Anatomy, Physiology and Exercise Physiology in the field of Physical Education and Sports
- 1.2. Cell: Definition, Types, Structure and Functions of Human Cells
- 1.3. Tissue: Definition, Types and Functions
- 1.4. System: Definition, Types and Functions in the Human Body.

Unit II: Musculoskeletal System

- 2.1. Skeletal System: Structure of Skeletal System; Classification of Bones and Joints. Anatomical Differences between Male and Female
- 2.2. Muscular System: Types, Location, Structure and Functions of Skeletal Muscle; Concept of Ligament and Tendon
- 2.3. Muscular Contraction: Meaning, Types, Definition and Characteristics
- 2.4. Effect of Exercise and Training on the Muscular System

Unit III: Circulatory System

- 3.1. Blood: Definition, Composition and Functions
- 3.2. Heart: Definition, Structure, Location and Functions. Blood Circulation Mechanism within Human Heart
- 3.3. Meaning, Definition and Measurement Procedure: Heart Rate, Pulse Rate, Stroke Volume, Cardiac Output, Blood Pressure, Athletic Heart and Bradycardia
- 3.4. Effect of Exercise and Training on the Circulatory System

Unit IV: Respiratory System

- 4.1. Structure and functions of human respiratory organs
- 4.2. Respiration mechanism: Internal and External
- 4.3. Meaning, definition and importance of terms: Respiratory Rate, Tidal Volume, Residual Volume, IRV, ERV, Vital Capacity, O₂ Debt and Second Wind
- 4.4. Effect of exercise and training on the Respiratory System

LAB: Measurement procedure of each item of individual/students should be noted in the practical notebook with their own photographs:

Height, Weight, BMI, WHR, Core Temperature, Resting Heart Rate, Exercise Heart Rate (Submaximal and Maximal), Target Heart Rate Zone, Resting Respiratory Rate, Exercise Respiratory Rate, Blood Pressure, Blood Sugar (Fasting, Random and PP), Oxygen Saturation, Vital Capacity

Suggested Readings

1. Sil, P. Sarirsikhay Sarirbidya, Clasiq Books, Kolkata
2. Kar, S. & Banerjee, A.K. Bishoy Sarirshiksha. Clasiq Books. Kolkata
3. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs
4. David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics
5. Fox, E.L... and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics Philadelphia: Sanders College Publishing
6. Sandhya Tiwaji. (1999). Exercise Physiology. Sports Publishers
7. Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Publications
8. Vincent, T. Murche: (2007). Elementary Physiology. Hyderabad: Publication
9. Yoga-The Science of Holistic Living, Vivekananda Kendra Prakashan Trust, Chennai
10. Saha, A. K. Sarir Siksher Ritiniti, Rana Publishing House, Kalyani

Major B2: Management of Physical Education and Sports

Credits 04 (FM: 75) Major

B2T: Management of Physical Education and Sports

Credits 03

Course Contents:

Unit I: Introduction to Management in Physical Education and Sports

- 1.1. Management in Physical Education and Sports: Meaning, Definition, aim and objectives, Nature and Scope
- 1.2. History and importance of Sports Management. Principles of Management in Physical Education and Sports
- 1.3. Qualities, Duties and Responsibilities of a Manager in Physical Education and Sports
- 1.4. Leadership: Definition, Types and Principles; Qualities of a Good Leader in Physical Education and Sports

Unit II: Tournaments

- 2.1. Tournaments: Meaning, Definition and Types; Knock-out, League, Combination and Challenge
- 2.2. Organisation: Fixture Drawing Procedure of Knock-out, League and Combination Tournaments
- 2.3. Annual Programme: Athletic Meet and Play Day Organisation and Management
- 2.4. Year-round Programme: Organising and Benefits of Intramural and Extramural Competition

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- 3.1. Structure and Functions of S.A.I., University Sports Council and A.I.U.
- 3.2. Care and Maintenance: Meaning, Methods, Need and Importance of Sports Equipment Field; Playground, Gymnasium and Swimming Pool. Documentation: Meaning, Methods, Need and Importance
- 3.3. Time Table: Meaning, Definition, Importance and Factors Affecting
- 3.4. Purchase: List of Consumable and Non-consumable sports goods and equipment in the department of Physical Education, Procedure to purchase sports goods and equipment in the department of Physical Education, stock entry, storing and distribution

Unit IV: Budget and Sponsorship

- 4.1. Financial Management: Meaning, Definition, Need and Importance
- 4.2. Budget: Meaning, Definition, Criteria, Principles; Steps for Preparing a Good Budget
- 4.3. Sponsorship: Meaning, Trends, Process, Aim and Objectives
- 4.4. Sports Promotion: Meaning, Means and Methods; Funding Agencies -Types, Procedure of Communication with the Agencies

Major B2P: Field Practical (Indigenous Games)

Credit: 01 (20 Marks)

KHO-KHO

Marks:10

Fundamental Skills:

- Chasing Skills: Sitting on the box-Parallel and Bullet Toe Method; Getting up from the Box Proximal and Distal Foot Method; Giving Kho- Simple, Early, Late and Judgment Kho; Pole Turn, Pole Diving, Tapping, Hammering, Rectification of Foul
- Running Skills: Chain Play, Ring Play and Chain, Ring Mixed Play, Running Zigzag, Avoiding and Dodging.
- Game Practice with Application of Rules and Regulations
- Rules and their Interpretations and Duties of the Officials
- Layout of the Kho-Kho Court

KABADDI

Marks:10

Fundamental Skills:

- Raiding Skills: Cant, Touching with Hands, Use of Leg-Toe Touch, Squat Leg Thrust, Side Kick, Mule Kick, Arrow Flying Kick, Roll Back; Crossing of Baulk Line; Crossing of Bonus Line
Additional Raiding Skills: Escaping from Various Holds, Techniques of Escaping from Chain Formation, Offense and Defense
- Holding Skills: Ankle, Knee, Thigh, Wrist, Crocodile and Washer Man Hold; Formation During Holding: Various Formations, Catching from Particular Position
- Rules and their Interpretations and Duties of the Officials
- Game Practice with the Application of Rules and Regulations
- Layout of the Kabaddi Court

Suggested Readings:

- Broyles, F. J. & Robert, H. D. Administration of Sports, Athletic Programme: A Managerial Approach. New York: Prentice Hall Inc.
- Bucher, C. A. Administration of Physical Education and Athletic Programme. St. Louis: The C.V. Mosby Co.
- Thomas, J. P. Organization & Administration of Physical Education. Madras: Gyanodayal Press
- Nanda, S.M. Sports Management, Friend Publications, New Delhi
- Paul, A. Sarirshikshay Management, Classic Publishers, Kolkata
- Bucher, C. A. Administration of Physical Education and Athletic Programme St. Louis The C.V. Mosby Co.
- Thomas, J. P. Organization & Administration of Physical Education. Madrai: Gyanodiyal Press
- Kar, S. & B. A.K. Sishoy Sarirshiksha. Clasiq Books. Kolkata
- Sil, P. Track and Field, Clisique Books, Kolkata.
- Saha, A. K. Sarir Siksher Ritiniti, Rana Publishing House, Kalyani.
- Bandopadhyay, K. Sarir Siksha Parichay, Classique Publishers, Kolkata.
- Petipus, et al. Athlete's Guide to Career Planning, Human Kinetics.
- Dharma, P.N. Fundamentals of Track and Field, Khel Sahitya Kendra, New Delhi.

Major B3: Anatomy, Physiology and Exercise Physiology

Credits 04 (FM: 75)

Major B3T: Anatomy, Physiology and Exercise Physiology

Credits 03

Course Contents:

Unit I: Introduction to Anatomy, Physiology and Exercise Physiology

- 1.1. Anatomy, Physiology and Exercise Physiology: Meaning, Definition, Scope and Importance; Role of Anatomy, Physiology and Exercise Physiology in the field of Physical Education and Sports
- 1.2. Cell: Definition, Types, Structure and Functions of Human Cells
- 1.3. Tissue: Definition, Types and Functions
- 1.4. System: Definition, Types and Functions in the Human Body.

Unit-II: Musculoskeletal System

- 2.1. Skeletal System: Structure of Skeletal System; Classification of Bones and Joints. Anatomical Differences between Male and Female
- 2.2. Muscular System: Types, Location, Structure and Functions of Skeletal Muscle; Concept of Ligament and Tendon
- 2.3. Muscular Contraction: Meaning, Types, Definition and Characteristics
- 2.4. Effect of Exercise and Training on the Muscular System

Unit III: Circulatory System

- 3.1. Blood: Definition, Composition and Functions
- 3.2. Heart: Definition, Structure, Location and Functions. Blood Circulation Mechanism within Human Heart
- 3.3. Meaning, Definition and Measurement Procedure: Heart Rate, Pulse Rate, Stroke Volume, Cardiac Output, Blood Pressure, Athletic Heart and Bradycardia
- 3.4. Effect of Exercise and Training on the Circulatory System

Unit IV: Respiratory System

- 4.1. Structure and functions of human respiratory organs
- 4.2. Respiration mechanism: Internal and External
- 4.3. Meaning, definition and importance of terms: Respiratory Rate, Tidal Volume, Residual Volume, IRV, ERV, Vital Capacity, O₂ Debt and Second Wind
- 4.4. Effect of exercise and training on the Respiratory System

LAB: Measurement procedure of each item of individual/students should be noted in the practical notebook with their own photographs:

Height, Weight, BMI, WHR, Core Temperature, Resting Heart Rate, Exercise Heart Rate (Submaximal and Maximal), Target Heart Rate Zone, Resting Respiratory Rate, Exercise Respiratory Rate, Blood Pressure, Blood Sugar (Fasting, Random and PP), Oxygen Saturation, Vital Capacity

Suggested Readings

1. Sil, P. Sarirsikhay Sarirbidya, Clasiq Books, Kolkata
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3. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs
4. David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics
5. Fox, E.L... and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing
7. Sandhya Tiwaji. (1999). Exercise Physiology. Sports Publishers
8. Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Publications
9. Vincent, T. Murche: (2007). Elementary Physiology. Hyderabad: Publication
10. Sil, P. Track and Field, Clisique Books, Kolkata.
11. Saha, A. K. Sarir Siksher Ritiniti, Rana Publishing House, Kalyani.
12. Bandopadhyay, K. Sarir Siksha Parichay, Clisique Books, Kolkata.
13. Petipus, et al. Athlete's Guide to Career Planning, Human Kinetics.
14. Dharma, P.N. Fundamentals of Track and Field, Khel Sahitya Kendra, New Delhi

Major Elective (MJE)-01: Field Practical

Credits 04 (FM: 75)

Major Elective (MJE)-01P: TRACK AND FIELD EVENTS

Credits 03

Course Contents:

1. RUNNING EVENTS (any two):

Credit: 1

- a) Sprinting Events: Starting Techniques; Crouch start (its variations), use of Starting Block, Acceleration with proper running techniques, Finishing Technique: Run Through, Forward Lunging and Shoulder Shrug
- b) Middle- and Long-Distance Events: Flying/Standing Start, Acceleration with Proper Running Techniques, Finishing Technique: Run Through, Forward Lunging and Shoulder Shrug
- c) Relay Race: Starting, Baton Holding/Carrying. Baton Exchange between Zone and Finishing

2. JUMPING EVENTS (any two):

Credit: 1

- a) Long Jump: Approach Run, Take-off, Flight in the Air (Hang Style/Hitch Kick) and Landing
- b) High Jump: Approach Run, Take off, Clearance over the bar and landing (Straddle Roll & Fosbury Flop)
- c) Triple Jump: Approach Run, Take-off, Flight in the Air and Landing

3. THROWING EVENTS (any two):

Credit: 1

- a) Shot Put: Holding the Shot, Placement, Initial Stance, Glide, Delivery Stance and Recovery (Perry O'Brien Technique)
- b) Discus Throw: Holding the Discus, Initial Stance, Primary Swing, Turn, Release and Recovery (Rotation in the Circle)
- c) Javelin Throw: Grip, Carry, Release and Recovery (3/5 Impulse stride)

Suggested Readings:

1. Broyles, F. J. & Robert, H. D. Administration of Sports, Athletic Programme: A Managerial Approach. New York: Prentice Hall Inc.
2. Bucher, C. A. Administration of Physical Education and Athletic Programme. St. Louis: The C.V. Mosby Co.
3. Thomas, J. P. Organization & Administration of Physical Education. Madras: Gyanodayal Press
4. Nanda, S.M. Sports Management, Friend Publications, New Delhi
5. Paul, A. Sarirshikshay Management, Classic Publishers, Kolkata
6. Bucher, C. A. Administration of Physical Education and Athletic Programme St. Louis The C.V. Mosby Co.
7. Thomas, J. P. Organization & Administration of Physical Education. Madrai: Gyanodiyal Press
8. Kar, S. & B. A.K. Sishoy Sarirshiksha. Clasique Books. Kolkata
9. Sil, P. Track and Field, Clisique Books, Kolkata.
10. Saha, A. K. Sarir Siksher Ritiniti, Rana Publishing House, Kalyani.
11. Bandopadhyay, K. Sarir Siksha Parichay, Classique Publishers, Kolkata.
12. Petipus, et al. Athlete's Guide to Career Planning, Human Kinetics.
13. Dharma, P.N. Fundamentals of Track and Field, Khel Sahitya Kendra, New Delhi.

1. BADMINTON OR TABLE TENNIS (Any one to be chosen):

Credit: 1

Course Contents:

BADMINTON

- a) Basic Knowledge: Various Parts of the Racket; Grip: Forehand, Backhand, Beval, Panhandle
- b) Basic Footwork and Court Coverage
- c) Basic Stance: Defensive, Attacking and Net Stance
- d) Service: Short Service, Long service and Long-High Service
- e) Shots: Forehand, Backhand, Clearing, Lobbing, Over-Head Shot, Defensive Clear Shot, Attacking Clear Shot, Drop Shot, Net Shot and Smash
- f) Game Practice with Application of Rules and Regulations

Suggested Readings

1. Ashok Kumar, Badminton, Discovery Publishing House, New Delhi
2. Narang, P. Play and Learn Badminton, Khel Sahitya Kendra, New Delhi
3. Bandopadhyay, K. Sarir Sikaba Parichay, Classique Books, Kolkata

TABLE TENNIS

- a) Basic Knowledge: Various Parts of the Racket and Grip; Shake Hand & Pen Hold Grip, Backhand and Forehand Grip
- b) Stance: Alternate and Parallel
- c) Service: Backhand and Forehand High Toss Service, Spin, Top Spin, Back Spin and Side Spin
- d) Chop: Backhand and Forehand
- e) Receive Return and Receiving: Push, Chop, Drive Loop and Flick with both Backhand & Forehand
- f) Game Practice with Application of Rules and Regulations

Suggested Readings

1. Ashok Kumar, Table Tennis, Discovery Publishing House, New Delhi
2. Narang, P. Play and Learn Table Tennis, Khel Sahitya Kendra, New Delhi
3. David Fairholm, The Pocket Guide to Table Tennis Tactics, Bell & Heyman, London

MINOR (MI)

MI-3/ C3: Anatomy, Physiology and Exercise Physiology

Credits 04 (FM: 75)

MI-3/ C3T: Anatomy, Physiology and Exercise Physiology

Credits 03

Course Contents:

Unit I: Introduction to Anatomy, Physiology and Exercise Physiology

- 1.1. Anatomy, Physiology and Exercise Physiology: Meaning, Definition, Need and Importance in the field of Physical Education and Sports
- 1.2. Cell: Definition, Types, Structure and Functions of Human Cells
- 1.3. Tissue: Definition, Types and Functions
- 1.4. System: Definition, Types and Functions in the Human Body.

Unit-II: Musculoskeletal System

- 2.1. Skeletal System: Structure of Skeletal System; Classification of Bones and Joints. Muscular System: Types, Location, Structure and Functions of Skeletal Muscle
- 2.2. Muscular Contraction: Meaning and Types
- 2.3. Effect of Exercise and Training on the Muscular System

Unit III: Circulatory System

- 3.1. Blood: Definition, Composition and Functions
- 3.2. Heart: Definition, Structure, Location and Functions. Blood circulation mechanism within human heart
- 3.3. Meaning, Definition and Measurement Procedure: Heart Rate, Pulse Rate, Stroke Volume, Cardiac Output and Blood Pressure
- 3.4. Effect of Exercise and Training on the Circulatory System

Unit IV: Respiratory System

- 4.1. Structure and functions of human respiratory organs
- 4.2. Respiration mechanism
- 4.3. Meaning, definition and importance of terms: Respiratory Rate, Tidal Volume, Residual Volume, IRV, ERV, Vital Capacity, O₂ Debt and Second Wind
- 4.4. Effect of exercise and training on the Respiratory System

MI-3/ C3P: Lab Practical

Credit: 01

LAB: Measurement procedure of each item of individual/students should be noted in the practical notebook with their own photographs:

Height, Weight, BMI, WHR, Core Temperature, Resting Heart Rate, Exercise Heart Rate (Submaximal and Maximal), Target Heart Rate Zone, Resting Respiratory Rate, Exercise Respiratory Rate, Blood Pressure, Blood Sugar (Fasting, Random and PP), Oxygen Saturation, Vital Capacity

Suggested Readings:

1. Saha, A. K. Sarir Siksher Ritiniti, Rana Publishing House, Kalyani
2. Bandopadhyay, K. Sarir Siksha Parichay, Classique Books, Kolkata
3. Dave Smith, Football Skills and Tactics, Chancellor Press
4. Norman Barrett, Super Soccer Skills, Dragon Grand Publishers, Glasgow

MI-4/C-4: Health Education, First-aid and Fitness

Credits 04 (FM: 75)

MI-4/C-4T: Health Education, First-aid and Fitness

Credits 03

Course Contents:

Unit-I: Introduction

- 1.1. Health: Meaning, Definition, Dimensions and Factors
- 1.2. Health Education: Meaning, Definition, Aim, Objectives and Principles
- 1.3. Personal Hygiene; Care of Eyes, Ears, Nose, Skin, Mouth and Teeth
- 1.4. Aim, Objectives and Functions: World Health Organization (WHO), United Nations Educational, Scientific & Cultural Organization (UNESCO) and AYUSH

Unit-II: Health Problems in India- Prevention and Control

- 2.1. Communicable Disease: Meaning, Definition and Types, Causes, Prevention and Control of Malaria, Dengue and Covid-19
- 2.2. Hypokinetic Disorders: Meaning, Definition and Causes; Management of Obesity, Diabetes, Asthma and Cardiovascular disorders
- 2.3. Posture: Meaning and Definition. Types of Postural Deformities;
- 2.4. Causes and Corrective Exercises for Kyphosis, Lordosis, Scoliosis, Bow-Legs, Knock Knees and Flat Foot. Importance of Good Posture

Unit-III: Injury Management and First-aid

- 3.1. First-aid: Meaning, Definition, Need and Importance; Golden Rules of First-aid
- 3.2. Common Sports Injuries and their Management (Strain, Sprain, Lower Back Pain, Tennis and Golfer's Elbow, Runner's Knee, Shin Pain, Blister, Abrasion, Laceration, Hematoma, Fracture and Dislocation)
- 3.3. Therapeutic Modalities: Therapy Meaning and Definition; Principles and Sports Injury Management procedure of Cryo-therapy and Thermo-therapy
- 3.4. Massage: Types, Benefits and Contraindications

Unit IV: Fitness

- 4.1. Fitness: Meaning, Definition, Dimensions, Need and Importance of Fitness.
- 4.2. Physical Fitness Components: Meaning, Definition, Health-related and Sports Performance-related Physical Fitness
- 4.3. Aging: Meaning and Definition; Aging Phenomenon: Role of Exercise in Aging
- 4.4. Contemporary Health Problems of College Youth- Alcohol, Drugs, Tobacco (Chewing, Sniffing, Smoking) their Harmful Effects, Substance Abuse Management

BADMINTON:

Course Contents:

BADMINTON

- a) Basic Knowledge: Various Parts of the Racket; Grip: Forehand, Backhand, Beval, Panhandle
- b) Basic Footwork and Court Coverage
- c) Basic Stance: Defensive, Attacking and Net Stance
- d) Service: Short Service, Long Service and Long-High Service
- e) Shots: Fore Hand, Back Hand, Clearing, Lobbing, Over-Head Shot, Defensive Clear Shot, Attacking Clear Shot, Drop Shot, Net Shot and Smash
- f) Game Practice with Application of Rules and Regulations

Suggested Readings

- 1) Ashok Kumar, Badminton, Discovery Publishing House, New Delhi
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OR

TABLE TENNIS

- a) Basic Knowledge: Various Parts of the Racket and Grip, Shake Hand & Pen Hold Grip, Back Hand and Fore Hand Grip
- b) Stance: Alternate and Parallel
- c) Service: Backhand and Forehand High Toss Service, Spin, Top Spin, Back Spin and Side Spin
- d) Chop: Backhand and Forehand
- e) Receive Return and Receiving: Push, Chop, Drive Loop and Flick with Both Backhand & Forehand
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Suggested Readings

- 1) Ashok Kumar, Table Tennis, Discovery Publishing House, New Delhi
- 2) Narang, P. Play and Learn Table Tennis, Khel Sahitya Kendra, New Delhi
- 3) David Fairholm, The Pocket Guide to Table Tennis Tactics, Bell & Heyman, London

SKILL ENHANCEMENT COURSE (SEC)

SEC 3P: GYMNASTICS & YOGA

Credits 03 FM: 50

Course Outline:

1. GYMNASTICS

Compulsory	Optional (any two)
a) Forward Roll b) T-Balance c) Forward Roll with Split Leg d) Backward Roll e) Cart-Wheel	a) Dive and Forward Roll b) Hand Spring c) Neck Spring d) Hand Stand and Forward Roll e) Summersault

2. YOGA:

2.1. Asanas: Standing Posture

- 2.1.1. Ardhashandrasana
- 2.1.2. Brikshasana
- 2.1.3. Padahasthasana

2.2. Sitting Posture

- 2.2.1. Ardhakurmasana
- 2.2.2. Paschimottanasana
- 2.2.3. Gomukhasana

2.3. Supine Posture

- 2.3.1. Setubandhasana
- 2.3.2. Halasana
- 2.3.3. Matsyasana

2.4. Prone Posture

- 2.4.1. Bhujangasana
- 2.4.2. Salvasana
- 2.4.3. Dhanurasana

3. SURYANAMASKARA: As per AIU Norm.

4. PRANAYAMA

- 3.1. Anulam Vilom
- 3.2. Bhramari
- 3.3. Bhastika

5. KRIYA

Kapalbhati

Suggested Reading:

1. Bandopadhyay, K. Sarir Siksha Parichay, Classique Books, Kolkata
2. Tyagi Arun Kumar, Gymnastics: Skills and Rules, Khel Sahitya Kendra, New Delhi
3. Dubey, H.C. Gymnastics, Discovery Publishing House, New Delhi
4. Saha, A. K. Sarir Siksher Ritiniti, Rana Publishing House, Kalyani
5. Bandopadhyay, K. Sarir Siksha Parichay, Classique Books, Kolkata
6. Tyagi Arun Kumar, Gymnastics: Skills and Rules, Khel Sahitya Kendra, New Delhi
7. Dubey, H.C. Gymnastics, Discovery Publishing House, New Delhi
8. Swami Satyananda Saraswati, Asana Pranayama Mudra Bandha. Yoga Publications Trust, Munger
9. Swami Satyananda Saraswati, Suranamaskara. Yoga Publications Trust, Munger
10. Yoga-The Science of Holistic Living, Vivekananda Kendra Prakashan Trust, Chennai