



Cooch Behar Panchanan Barma University

B.A. Program in Physical Education 1st Semester

Course Code	Course Title	Course Type	LTP	Credit	Marks
CC1A	Foundation and History of Physical Education and Field Practical	Core course	4-0-2	4+2	50
CC2A	Discipline-2 (Core-1) other than Physical Education	Core course		5	50
CC (Language)	Language 1A	Core course Language	5-1-0	5	50
AECC 1	Environmental Studies	AECC-1 compulsory	2-0-0	5	50
SEMESTER TOTAL				21	200

B.A. Program in Physical Education 2nd Semester

Course Code	Course Title	Course Type	LTP	Credit	Marks
CC1B	Management of Physical Education and Sports and Field Practical	Core course	4-0-2	4+2	50
CC2B	Discipline-2(Core-2) other than Physical Education	Core course		5	50
CC(Language)	Language 2A	Core course Language	5-1-0	5	50
AECC-2	communicative ENG or MIL	AECC-2 Compulsory	2-0-0	5	50
SEMESTER TOTAL				21	200

B.A. Program in Physical Education
3rd Semester

Course Code	Course Title	Course Type	LTP	Credit	Marks
CC1C	Anatomy, Physiology and Exercise Physiology and Lab Practical	Core course	4-0-2	4+2	50
CC2C	Discipline-2 (Core-3) other than Physical Education	Core course		5	50
CC (Language)	Language 1B	Core course Language	5-1-0	5	50
SEC (1)	Track and Field	SEC	0-0-2	4	50
		SEMESTER TOTAL		20	200

B.A. Program in Physical Education
4th Semester

Course Code	Course Title	Course Type	LTP	Credit	Marks
CC1D	Health Education, Physical Fitness and Wellness and Lab Practical	Core course	4-0-2	4+2	50
CC2D	Discipline-2 (Core-4) other than Physical education	Core course		5	50
CC (Language)	Language 2B	Core course Language	5-1-0	5	50
SEC (2)	Gymnastics and Yoga	SEC	0-0-2	4	50
		SEMESTER TOTAL		20	200

B.A. Program in Physical Education
5th Semester

Course Code	Course Title	Course Type	LTP	Credit	Marks
DSE 1	DSE (Any one from Discipline-1 and any one from Discipline-2)				
	Discipline-1 (any one)	DSE		4+2	50
	Tests, Measurements and Evaluation in Physical Education & Field Practical		4-0-2		
	Sports Training & Field Practical		4-0-2		
	Discipline-2(Other than physical Education)			5	50
	1		5-0-1		
	2		5-0-1		
GE 1	GE -1 (for the students other than Phy. Edn.)	GE		5	50
	Modern trends in Physical Education and Sports Sciences		6-0-0		
SEC 3	SEC 3	SEC		4	50
	Indian Games (any one)- Kabaddi / Kho-Kho And Racket Sports (Any one)- Badminton/ Table Tennis		0-0-2		
		SEMESTER TOTAL		20	200

B.A. Program in Physical Education
6th Semester

Course Code	Course Title	Course Type	LTP	Credit	Marks
DSE 2	DSE (Any one from Discipline-1 and any one from Discipline-2)				
	Discipline-1(Any one)	DSE		4+2	50
	Psychology in Physical Education and Sports and Lab Practical		4-0-2		
	Project work		2-0-4		
	Discipline-2(Other than physical Education)			5	50
	1		5-0-1		
	2		5-0-1		
GE 2	GE 2 (for the students other than Phy. Edn.)	GE		5	50
	Health Education and Tests & Measurements in Physical Education		6-0-0		
			4-0-2		
SEC 4	SEC4	SEC		4	50
	Ball Games (any two) Football/Handball/Basketball/ Volleyball/ Netball/ Throwball		0-0-2		
		SEMESTERTOTAL		20	200

NB:

One credit = One hour (theory class)

One credit = One and half hour (practical class)

Total credits = 122

Semester wise credit – 1st=21, 2nd=21, 3rd =20, 4th =20, 5th =20 and 6th =20

SEMESTER- 1

CORE PAPER-1: Foundation and History of Physical Education

Course Code- CC1A

Total number of classes - 60

Unit- I: Introduction

LH - 12

- 1.1. Meaning and definition of Physical Education.
- 1.2. Aim and objectives of Physical Education.
- 1.3. Modern concept of Physical Education.
- 1.4. Importance of Physical Education.

Unit- II: Biological and Sociological Foundations of Physical Education

LH - 18

- 2.1. Biological Foundation- Meaning and definition of growth and development. Factors affecting growth and development. Differences of growth and development. Principles of growth and development.
- 2.2. Age- Chronological age, anatomical age, physiological age and mental age.
- 2.3. Sociological Foundation- Definition of Sociology, Society and Socialization.
- 2.4. Physical Education & Sports as a socialization force.

Unit- III: History of Physical Education

LH - 18

- 3.1 Historical development of Physical Education and Sports in India- Pre-Independence period.
- 3.2 Historical development of Physical Education and Sports in India-Post-Independence period.
- 3.3 Asian Games and Modern Olympic Games.
- 3.4 National Sports Awards- Arjuna Award, Rajiv Gandhi Khel Ratna Award, Dronacharya Award.

Unit- IV: Yoga Education

LH - 12

- 4.1 Meaning and definition of the term Yoga.
- 4.2 Aim and objectives of Yoga.
- 4.3 Types of Yoga
- 4.4 Importance of Yoga.

FIELD PRACTICAL

1. Learn and demonstrate the technique of Suryanamaskar.
2. Development of physical fitness through Callisthenics and Aerobic activities.

REFERENCES

1. Graham, G. (2001) Teaching Children Physical Education: Becoming a Master Teacher. Human Kinetics, Champaign, Illinois, USA.
2. Kamlesh, M.L. & Singh, M.K. (2006) Physical Education (Naveen Publication).
3. Lau, S.K. (1999) Great Indian Players, New Delhi, Sports.
4. Lumpkin, A. (2007) Introduction to Physical Education, Exercise Science and Sports Studies, McGraw Hill, New York, USA.
5. Siedentop, D. (2004) Introduction to Physical Education, Fitness and Sport, McGraw Hill Companies Inc., New York, USA.
6. Shaffer, D.R. (2002) Development Psychology: Childhood and Adolescence. Thomson, Sydney, Australia.
7. Shukla, (2000) Mother on Education, National Council of Teacher Education, New Delhi.
8. Singh, A. et al. (2000) Essential of Physical Education, Kalyani Publishers, Ludhiana, Punjab.
9. Wuest, D.A. & C.A. Bucher (2006) Foundation of Physical Education, Exercise Science, and Sports. McGraw Hill Companies Inc.; New York, USA.

10. Fahey, T.D., M.P. Insel and W.T. Rath (2006) Fit & Well: Core Concepts and Labs in Physical Fitness, McGraw Hill, New York.
11. Kansal, D.K. (2012) A Practical Approach to Test Measurement and Evaluation Sports and Spiritual Science Publication, New Delhi.

SEMESTER- 2

CORE PAPER- 2: Management of Physical Education and Sports

Course Code- CC1B

Total number of classes - 60

Unit- I: Introduction

LH - 12

- 1.1. Concept and definition of Sports Management.
- 1.2. Important of Sports Management.
- 1.3. Purpose of Sports Management.
- 1.4. Principles of Sports Management.

Unit- II: Tournaments

LH – 18

- 2.1. Tournaments: Meaning and definition and types of tournaments (Knock-out, League, Combination, Challenge).
- 2.2. Procedure of drawing fixture.
- 2.3. Method of organising Annual Athletic Meet and Play Day.
- 2.4. Method of organising of Intramural and Extramural competition.

Unit- III: Facilities and Equipments

LH - 18

- 3.1 Method of calculation of Standard Track & Field events (any one).
- 3.2 Care and maintenance of play ground.
- 3.3 Importance, care and maintenance of sports equipments.
- 3.4 Time Table: Meaning and importance of time table.

Unit- IV: Leadership

LH - 12

- 4.1 Meaning and definition of leadership.
- 4.2 Qualities of good leader in Physical Education.
- 4.3 Principles of leadership activities.
- 4.4 Hierarchy of Leadership in School, College and University level.

FIELD PRACTICAL 25 Marks: (15 marks to be evaluated by an external examiner, 6 marks to be evaluated internally & 4 marks attendance).

Lay out knowledge and Officiating ability-

1. Track and Field events (any one).
2. Games: Football, Kabaddi, Kho-Kho and Volleyball (any one).

REFERENCES

1. Broyles, F. J. & Rober, H. D. (1979). Administration of sports, Athletic programme: A Managerial Approach. New York: Prentice hall Inc.
2. Bucher, C. A. (1983). Administration of Physical Education and Athletic programme. St. Louis: The C.V. Mosby Co.
3. Kozman, H.C. Cassidy, R. & Jackson, C. (1960). Methods in Physical Education. London: W.B. Saunders Co.
4. Pandey, L.K. (1977). Methods in Physical Education. Delhi: Metropolitan Book Depot.
5. Sharma, V.M. & Tiwari, R.H.: (1979). Teaching Methods in Physical Education. Amaravati: Shakti Publication.
6. Thomas, J. P. (1967). Organization & administration of Physical Education. Madras: Gyanodayal Press.
7. Tirunaryanan, C. & Hariharan, S. (1969). Methods in Physical Education. Karaikudi: South India Press.
8. Voltmer, E. F. & Esslinger, A. A. (1979). The organization and administration of Physical Education. New York: Prentice Hall Inc.
9. Singh, A. et al. (2010) Essential of Physical Education. Kalyani Publishers.

SEMESTER- 3

CORE PAPER- 3: Anatomy, Physiology and Exercise Physiology

Corse Code- CC1C

Total number of classes - 60

Unit- I: Introduction

LH - 12

- 1.1. Meaning and definition of Anatomy, Physiology and Exercise Physiology.
- 1.2. Importance of Anatomy, Physiology and Exercise Physiology in Physical Education.
- 1.3. Human Cell- Structure and function.
- 1.4. Tissue- Types and functions.

Unit- II: Musculo-skeletal System

LH - 18

- 2.1. Skeletal System- Structure of Skeletal System. Classification and location of bones and joints. Anatomical differences between male and female.
- 2.2. Muscular System- Type, location, function and structure of muscle.
- 2.3. Types of muscular contraction.
- 2.4. Effect of exercise on muscular system.

Unit- III: Circulatory System

LH - 18

- 3.1 Blood- Composition and function?
- 3.2 Heart- Structure and functions.
- 3.3 Blood Pressure, Athletic Heart and Bradycardia.
- 3.4 Effect of exercise on circulatory system.

Unit- IV: Respiratory System

LH - 12

- 4.1 Structure and function of Respiratory organs.
- 4.2 Mechanism of Respiration.
- 4.3 Vital Capacity, O₂ Debt and Second Wind.
- 4.4 Effect of exercise on respiratory system.

LAB PRACTICAL

1. Assessments of BMI and WHR.
2. Assessment of Heart rate, Blood Pressure, Respiratory Rate, and Pick Flow Rate (any two).

REFERENCES

1. Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: Poompugar Pathipagam.
2. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
3. David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.
4. Fox, E.L., and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.
5. Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co. Richard, W. Bowers. (1989). Sports Physiology. WMC: Brown Publishers.
6. Sandhya Tiwaji. (1999). Exercise Physiology. Sports Publishers.
7. Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Subject Publications.
8. Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication.
9. William, D. Mc Aradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance. Philadelphia: Lippincott Williams and Wilkins Company.

SEMESTER- 3

Track and Field

Course code: SEC 1

1. Track Events

- 1.1. Starting Techniques: Standing start and Crouch start (its variations) and use of Block.
- 1.2. Acceleration with proper running techniques.
- 1.3. Finishing technique: Run Through, Forward Lunging and Shoulder Shrug.
- 1.4. Relay Race: Starting, Baton Holding/Carrying, Types of Baton Exchange in between zone, and Finishing.

2. Field events (any two)

- 2.1. Long Jump: Approach Run, Take-off, Flight in the air (Hang Style/Hitch Kick) and Landing.
- 2.2. High jump: Straddle roll, Approach Run, Take-off, Bar Clearance and Landing.
- 2.3. Shot put: Holding the Shot, Placement, Initial Stance, Glide and Recovery (Perry O'Brien Technique).
- 2.4. Discus Throw: Holding the Discus, Initial Stance, Primary Swing, Turn, Release and Recovery.
- 2.5. Javelin Throw: Grip, Carry, Release and Recovery (3/5 Impulse stride).

SEMESTER- 4

CORE PAPER- 4: Health Education, Physical Fitness and Wellness

Corse Code- CC1D

Total number of classes - 60

Unit- I: Introduction

LH - 18

- 1.1. Concept, definition and dimension of Health.
- 1.2. Definition, aims, objectives and principles of Health Education.
- 1.3. Health Agencies- World Health Organization (WHO), United Nations Educational Scientific and Cultural Organization (UNESCO).
- 1.4. School Health Program- Health Service, Health Instruction, Health Supervision, Health appraisal and Health Record.

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

LH - 18

- 2.1. Communicable Diseases- Malaria, Dengue and Chicken Pox.
- 2.2. Life-style Diseases- Obesity, Diabetes and AIDS.
- 2.3. Nutrition- Nutritional requirements for daily living. Balance Diet. Health disorders due to deficiencies of Vitamins and Minerals.
- 2.4. Postural deformities- Causes and corrective exercise of Kyphosis, Lordosis, Scoliosis, Knock Knees and Flat Foot.

Unit- III: Motor Fitness and Wellness

LH - 12

- 3.1 Physical Fitness- Meaning, definition and Importance of Motor Fitness.
- 3.2 Components of Physical Fitness- Health and Performance related Physical Fitness.
- 3.3 Concept of Wellness. Relationship between Physical activities and Wellness.
- 3.4 Ageing- Physical activities and its importance.

Unit- IV: Health and First-aid Management

LH - 12

- 4.1 First aid- Meaning, definition, importance and golden rules of First-aid.
- 4.2 Concept of sports injuries- Sprain, Strain, Fracture and Dislocation.
- 4.3 Management of sports injuries through the application of Cryo-therapy and Thermo-therapy.
- 4.4 Management of sports injuries through the application of Exercise and Massage therapy.

LAB PRACTICAL

1. First-aid Practical- Triangular Bandage: Slings (Arm Sling, Collar & Cuff Sling), Roller Bandages: Simple Spiral, Reverse Spiral, Figure of Eight, Spica.
2. Practical application of cryotherapy.

REFERENCES

1. Bucher, Charles A. "Administration of Health and Physical Education Programme".
2. Delbert, Oberteuffer, et. al." The School Health Education".
3. Ghosh, B.N. "Treaties of Hygiene and Public Health".
4. Hanlon, John J. "Principles of Public Health Administration" 2003.
5. Turner, C.E. "The School Health and Health Education".
6. Moss et. al. "Health Education" (National Education Association of U.T.A.).
7. Nemir A. "The School Health Education" (Harber and Brothers, New York).
8. Nutrition Encyclopedia, edited by Delores C.S. James, The Gale Group, Inc.
9. Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise as Nature Intended. Angus and Robertson.

SEMESTER- 4

Gymnastics and Yoga

Course code: SEC 2

GYMNASTICS

1. Compulsory

- 1.1. Forward Roll
- 1.2. T-Balance
- 1.3. Forward Roll with Split leg
- 1.4. Backward Roll
- 1.5. Cart-Wheel

[Note: Perform the above Gymnastic skills continuously in the same sequence]

2. Optional (any two)

- 2.1. Dive and Forward Roll
- 2.2. Hand Spring
- 2.3. Head Spring
- 2.4. Neck Spring
- 2.5. Hand Stand and Forward Roll

YOGA

3. Asanas

3.1. Standing Position

- 3.1.1. Ardhashandrasana
- 3.1.2. Brikshasana
- 3.1.3. Padahasthasana

3.2. Sitting Position

- 3.2.1. Ardhakurmasana
- 3.2.2. Paschimottanasana
- 3.2.3. Gomukhasana

3.3. Supine Position

- 3.3.1. Setubandhasana
- 3.3.2. Halasana
- 3.3.3. Matsyasana

3.4 Prone Position

- 3.4.1 Bhujangasana
- 3.4.2 Salvasana
- 3.4.3 Dhanurasana

3.5 Inverted Position

- 3.5.1 Sarvangasana
- 3.5.2 Shirsasana
- 3.5.3 Bhagrasana

[Note: One Asana is compulsory from each position]

4. Pranayama (any two)

- 4.1. Kapalbhati
- 4.2. Bhramri
- 4.3. Anulam Vilom.

SEMESTER- 5

Tests, Measurements and Evaluation in Physical Education

Course code: DSE 1

Total number of classes - 60

Unit- I: Introduction

LH - 12

- 1.1. Concept of test, measurement & Evaluation.
- 1.2. Criteria of good test.
- 1.3. Principles of Evaluation.
- 1.4. Importance of Test, Measurement and Evaluation in Physical Education and Sports.

Unit- II: Measurements of Body Compositions and Somatotype Assessment LH - 18

Body Mass Index (BMI)- Concept and method of measurement.

- 2.1. Body Fat- Concept, its merits and demerits in sports performance.
- 2.2. Lean Body Mass (LBM)- Concept and its importance.
- 2.3. Somatotype- Concept, types and its importance.

Unit- III: Fitness Test

LH - 18

- 3.1 Kraus-Weber Muscular Strength Test
- 3.2 AAHPER Youth Fitness Test
- 3.3 Queens College Step Test
- 3.4 Harvard Step Test

Unit- IV: Sports Skill Test

LH - 12

- 4.1 Lockhart and McPherson Badminton Skill Test
- 4.2 Johnson Basketball Test Battery
- 4.3 McDonald Soccer Test
- 4.4 Brady Volleyball Test

LAB & FIELD PRACTICAL

1. Assessment of any two sports skills Test.
2. Assessment of AAHPER Youth Fitness Test and Harvard Step Test (any one).

REFERENCES

1. Authors Guide (2013) ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications.
2. Collins, R.D., & Hodges P.B. (2001) A Comprehensive Guide to Sports Skills Tests and Measurement (2nd edition) Lanham: Scarecrow Press.
3. Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company.
4. Getchell B (1979) Physical Fitness A Way of Life, 2nd Edition New York.
5. John Wiley and Sons, Inc Jenson, Clayne R and Cyntha, C. Hirst (1980) Measurement in Physical Education and Athletics, New York, Macmillan Publishing Co. Inc.
6. Kansal D.K. (1996), Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications.
7. Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication.
8. Vivian H. Heyward (2005) Advance Fitness Assessment and Exercise Prescription, 3rd Edition, Dallas TX: The Cooper Institute for Aerobics Research.
9. Wilmore JH and Costill DL. (2005) Physiology of Sport and Exercise: 3rd Edition. Champaign IL: Human Kinetics.
10. Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications

SEMESTER- 5

Sports Training Course code: DSE1

Total number of classes - 60

Unit- I: Introduction

LH - 12

- 1.1. Meaning and definition of Sports Training.
- 1.2. Aim and objectives of Sports Training.
- 1.3. Characteristics of sports training
- 1.4. Principles of Sports Training.

Unit- II: Principle of Training and Conditioning

LH - 18

- 2.1. Warming up and Cooling down- Meaning, types and methods.
- 2.2. Conditioning- Concept of Conditioning and its principles.
- 2.3. Training Methods- Circuit Training, Interval Training, Weight Training.
- 2.4. Periodisation- Meaning, types, aim and contents of different periods.

Unit- III: Training Load and Adaptation

LH - 18

- 3.1 Training Load- Meaning, definition, types and factors of training load.
- 3.2 Components of training load.
- 3.3 Over Load- Meaning, causes, symptoms and tackling of over load.
- 3.4 Load adaptation- Meaning and conditions of adaptation.

Unit- IV: Training Techniques

LH - 12

- 4.1 Strength- Meaning and methods of strength development.
- 4.2 Speed- Meaning and methods of speed development.
- 4.3 Endurance- Meaning and methods of endurance development.
- 4.4 Flexibility- Meaning and methods of flexibility development.

FIELD PRACTICAL

1. Practical Experience of Weight Training and Circuit Training (any one).
2. Measurement of Balance, Sargent Vertical Jump and Flexibility (any two).

REFERENCES

1. Bunn, J.N. (1998) Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice Hall Inc.
2. Cart, E. Klafs & Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V. Mosphy Company.
3. Daniel, D. Arnheim (1991) Principles of Athletic Training, St. Luis, Mosby Year Book.
4. David R. Mottram (1996) Drugs in Sport, School of Pharmacy, Liverpool: John Moore University.
5. Gary, T. Moran (1997) – Cross Training for Sports, Canada : Human Kinetics Hardayal.
6. Singh (1991) Science of Sports Training, New Delhi, DVS Publications.
7. Jensen, C.R. & Fisher A.G. (2000) Scientific Basic of Athletic Conditioning, Philadelphia.
8. Ronald, P. Pfeiffer (1998) Concepts of Athletics Training 2nd Edition, London: Jones and Bartlett Publications.
9. Yograj Thani (2003), Sports Training, Delhi : Sports Publications

SEMESTER- 5

Modern Trends and Practices in Physical Education Exercise Sciences

(For the students other than Physical Education)

Course code: GE1

Total number of classes - 60

Unit- I: Introduction

LH - 12

- 1.1. Meaning, definition and importance of physical Education and Sports.
- 1.2. Aims, objectives and scope of Physical Education.
- 1.3. Types of sports and their utility in physical education.
- 1.4. Meaning, definition and importance of Physical fitness and Motor fitness. Difference between physical fitness and motor fitness.

Unit- II: Biological, Psychological and Sociological Foundations of Physical Education

LH - 18

- 2.1. Biological Foundation- Meaning and definition of growth and development. Factors affecting growth and development. Principles of growth and development.
- 2.2. Meaning and definition of Psychology. Importance of Psychology in Physical Education. Qualities of good leader in Physical Education.
- 2.3. Sociological Foundation- Meaning and definition of Sociology. Social values and their Importance. Socialization Through Sports
- 2.4. Role of games and sports in National and International integration.

Unit- III: History of Physical Education

LH - 12

- 3.1 Historical development of Physical Education and Sports in India- Pre-Independence period and Post-Independence period.
- 3.2 Ancient Olympic Games
- 3.3 Modern Olympic Games.
- 3.4 Asian Games

Unit- IV: Exercise Sciences

LH - 18

- 4.1 Meaning, definition and importance Exercise and Exercise Physiology.
- 4.2 Effects of exercise on Muscular systems.
- 4.3 Effects of exercise on Circulatory System.
- 4.4 Effects of exercise on Respiratory System.

REFERENCES

1. Kamlesh, M.L. & Singh, M.K. (2006) Physical Education (Naveen Publication).
2. Lumpkin, A. (2007) Introduction to Physical Education, Exercise Science and Sports Studies, McGraw Hill, New York, USA.
3. Siedentop, D. (2004) Introduction to Physical Education, Fitness and Sport, McGraw Hill Companies Inc., New York, USA.
4. Shaffer, D.R. (2002) Development Psychology: Childhood and Adolescence. Thomson, Sydney, Australia.
5. Shukla, (2000) Mother on Education, National Council of Teacher Education, New Delhi.
6. Singh, A. et al. (2000) Essential of Physical Education, Kalyani Publishers, Ludhiana, Punjab.
7. Wuest, D.A. & C.A. Bucher (2006) Foundation of Physical Education, Exercise Science, and Sports. McGraw Hill Companies Inc.; New York, USA.
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10. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
11. David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.

SEMESTER- 5

Indian Games and Racket Sports

Course Code: SEC3

KABADDI

A. Fundamental skills

1. Skills in Raiding: Touching with hands, Use of leg-toe touch, squat leg thrust, side kick, mule kick, arrow fly kick, crossing of baulk line. Crossing of Bonus line.
2. Skills of holding the raider: Various formations, catching from particular position, different catches, catching formation and techniques.
3. Additional skills in raiding: Escaping from various holds, techniques of escaping from chain formation, offense and defence.
4. Game practice with application of Rules and Regulations.

B. Rules and their interpretations and duties of the officials.

OR

KHO-KHO

A. Fundamental skills

1. Skills in Chasing: Sit on the box (Parallel & Bullet toe method), Get up from the box (Proximal & Distal foot method), Give Kho (Simple, Early, Late & Judgment), Pole Turn, Pole Dive, Tapping, Hammering, Rectification of foul.
2. Skills in running: Chain Play, Ring play and Chain & Ring mixed play.
3. Game practice with application of Rules and Regulations.

B. Rules and their interpretations and duties of the officials.

AND

BADMINTON

A. Fundamental skills

1. Basic Knowledge: Various parts of the Racket and Grip.
2. Service: Short service, Long service, Long-high service.
3. Shots: Over head shot, Defensive clear shot, Attacking clear shot, Drop shot, Net shot, Smash.
4. Game practice with application of Rules and Regulations.

B. Rules and their interpretations and duties of the officials.

OR

TABLE TENNIS

A. Fundamental skills

1. Basic Knowledge: Various parts of the Racket and Grip (Shake Hand & Pen Hold Grip).
2. Stance: Alternate & Parallel.
3. Push and Service: Backhand & Forehand.
4. Chop: Backhand & Forehand.
5. Receive: Push and Chop with both Backhand & Forehand.
6. Game practice with application of Rules and Regulations.

B. Rules and their interpretations and duties of the officials.

SEMESTER- 6

Psychology in Physical Education and Sports

Course Code- DSE2

Total number of classes - 60

Unit- I: Introduction

LH - 12

- 1.1. Meaning and definition Psychology.
- 1.2. Importance and scope of Psychology.
- 1.3. Meaning and definition Sports Psychology.
- 1.4. Need for knowledge of Sports Psychology in the field of Physical Education.

Unit- II: Learning

LH - 18

- 2.1. Meaning and definition of learning.
- 2.2. Theories of learning and Laws of learning.
- 2.3. Learning curve: Meaning and Types.
- 2.4. Transfer of learning- Meaning, definition type and factors affecting transfer of learning.

Unit- III: Psychological Factors

LH - 18

- 3.1 Motivation- Meaning, definition, type and importance of Motivation in Physical Education and Sports.
- 3.2 Emotion- Meaning, definition, type and importance of Emotion in Physical Education and Sports.
- 3.3 Personality- Meaning, definition and type Personality traits.
- 3.4 Role of physical activities in the development of personality.

Unit- IV: Stress and Anxiety

LH - 12

- 4.1 Stress- Meaning, definition and types of Stress.
- 4.2 Causes of Stress.
- 4.3 Anxiety- Meaning, definition and types of Anxiety.
- 4.4 Management of Stress and Anxiety through physical activity and sports.

LAB PRACTICAL

1. Assessment of SCATS and HARDINES (any one).
2. Measurement of Reaction Time, Distance Perception and Hand & Eye Co-ordination (any one).

REFERENCES

1. Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Tests, New Delhi: National Council of Educational Research and Training Publication.
2. Jain. (2002), Sports Sociology, Heal Sahety Kendre Publishers.
3. Jay Coakley. (2001) Sports in Society – Issues and Controversies in International Education, Mc-Craw Seventh Ed.
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SEMESTER- 6

Project

1.1 Subjects: Physical Fitness Components, Educational Tour, Leadership Camp, Non-communicable diseases/organization of Annual College Athletic meet.

1.2 Project Report Format:

- Introduction
- Procedure
- Results
- Conclusions
- Recommendations
- References

SEMESTER- 6

Health Education and Tests & Measurements in Physical Education

(For the students other than Physical Education)

Course Code: GE-2

Total number of classes - 60

Unit- I: Introduction

LH - 18

- 1.1. Concept, definition and dimension of Health.
- 1.2. Definition, aim, objectives and principles of Health Education.
- 1.3. Health Agencies- World Health Organization (WHO), United Nations Educational Scientific and Cultural Organization (UNESCO).
- 1.4. Nutrition- Nutritional requirements for daily living. Balance Diet. Health disorders due to deficiencies of Vitamins and Minerals.

Unit- II: Health and First-aid Managements

LH - 18

- 2.1. First aid- Meaning, definition, importance and golden rules of First-aid.
- 2.2. Concept of sports injuries- Sprain, Strain, Fracture and Dislocation.
- 2.3. Postural deformities- Causes and corrective exercise of Kyphosis, Lordosis, Scoliosis, Knock Knees and Flat Foot.
- 2.4. Hypo-kinetic Diseases and Physical Activities- Obesity and Diabetes.

Unit- III: Measurement of Body Compositions and Somatotype Assessment LH -

- 12 3.1 Body Mass Index (BMI)- Concept and method of measurement.
- 3.2 Body Fat- Concept its merits and demerits in sports performance.
- 3.3 Lean Body Mass (LBM) - Concept and its importance.
- 3.4 Somatotype- Concept, types and its importance.

Unit- IV: Fitness Test

LH - 12

- 4.1 Kraus-Weber Muscular Strength Test
- 4.2 AAHPER Youth Fitness Test
- 4.3 Queens College Step Test
- 4.4 Harvard Step Test

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SEMESTER- 6

BALL GAMES (Any two)

Course code: SEC4

FOOTBALL

A. Fundamental Skills

1. Kicking: Kicking the ball with inside of the foot, Kicking the ball with Full Instep of the foot, Kicking the ball with Inner Instep of the foot, Kicking the ball with Outer Instep of the foot and Lofted Kick.
2. Trapping: Trapping- the Rolling ball, and the Bouncing ball with sole of the foot.
3. Dribbling: Dribbling the ball with Instep of the foot, Dribbling the ball with Inner and Outer Instep of the foot.
4. Heading: In standing, running and jumping condition.
5. Throw-in: Standing throw-in and Running throw-in.
6. Feinting: With the lower limb and upper part of the body.
7. Tackling: Simple Tackling, Slide Tackling.
8. Goal Keeping: Collection of Ball, Ball clearance- kicking, throwing and deflecting.
9. Game practice with application of Rules and Regulations.

B. Rules and their interpretation and duties of officials.

HANDBALL

A. Fundamental Skills

1. Catching, Throwing and Ball control,
2. Shooting: Jump shot, Center shot, Dive shot, Reverse shot.
3. Dribbling: High and low.
4. Attack and counter attack, simple counter attack, counter attack from two wings and center.
5. Blocking, GoalKeeping and Defensive skills.
6. Game practice with application of Rules and Regulations.

B. Rules and their interpretation and duties of officials.

BASKETBALL

A. Fundamental Skills

1. Passing: Two hand Chest Pass, Two hands Bounce Pass, One hand Baseball Pass, Side arm Pass, Overhead Pass, Hook Pass.
2. Receiving: Two hand receiving, One hand receiving, Receiving in stationary position, Receiving while Jumping and Receiving while Running.
3. Dribbling: High Dribble, Low Dribble, Reverse Dribble.
4. Shooting: Lay-up shot and its variations, one hand set shot, two hands jump shot, Hook shot, Free Throw.
5. Rebounding: Defensive rebound and Offensive rebound.
6. Individual Defend: Guarding the player with the ball and without the ball, Pivoting.
7. Game practice with application of Rules and Regulations.

B. Rules and their interpretation and duties of officials.

VOLLEYBALL

A. Fundamental skills

1. Service: Under arm service, Side arm service, Tennis service, Floating service.
2. Pass: Under arm pass, Over head pass.
3. Spiking and Blocking.
4. Game practice with application of Rules and Regulations.

B. Rules and their interpretation and duties of officials.

NETBALL

A. Fundamental skills

1. Catching: one handed, two handed, with feet grounded and in flight.
2. Throwing (Different passes and their uses): One hand passes (shoulder, high shoulder, underarm, bounce, lob), two hand passes (Push, overhead and bounce).
3. Footwork: Landing on one foot, landing on two feet, Pivot, Running pass.
4. Shooting: One hand, forward step shot, and backward step shot.
5. Techniques of free dodge and sprint, sudden sprint, sprint and stop, sprinting with change at speed.
6. Defending: Marking the player, marking the ball, blocking, inside the circle, outside the circle. Defending the circle edge against the passing.
7. Intercepting: Pass and shot.
8. Game practice with application of Rules and Regulations.

B. Rules and their interpretation and duties of officials.

THROWBALL

Fundamental skills:

Overhand service, Side arm service, two hand catching, one hand overhead return, side arm return.

Rules and their interpretations and duties of officials.

Calculation of marks for attendance, total marks – 04 (four)

- a) 90% and above - 04 marks
- b) 75% and above but below 90% - 03 marks
- c) 60% and above but below 75% - 02 marks
- d) 50% and above but below 60% - 01 mark

Evaluation process:

Theory – Total marks – 50

Break-up of marks – End sem exam – 25 marks, CIA- 06 marks, attendance - 04 marks and field/lab practical-15 marks which will be evaluated by the external examiner

Practical – Total marks – 50

Break-up of marks – End sem exam – 40 marks will be evaluated by the external examiner, CIA-06 marks, attendance-04 marks

Pattern of questions for theoretical end sem exam will be followed as per existing pattern of the University: