

**Avinashilingam Institute for Home Science and Higher Education for Women**

(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD)
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

DEPARTMENT OF PHYSICAL EDUCATION**B.Sc Physical Education****Programme Outcomes (PO)**

- PO 1. Apply physiological, psychological and scientific principles of sports sciences.
- PO 2. Demonstrate and implement rules and regulations of various sports and games, tactics and techniques, officiating and coaching and organise sports tournaments at all levels for general and differently abled students.
- PO 3. Design and construct standardized playfields/ equipments/ training plans considering health, fitness, performance, safety, economy and environment.
- PO 4. Foster a pedagogy based critical thought and action in teaching, learning, employability and entrepreneurial competencies by using modern tools/resources and softwares to develop digital literacy in physical education
- PO 5. Apply disciplinary knowledge and skills to exhibit professional ethics to promote sports for all round development.
- PO 6. Demonstrate a better understanding of communication process in oral and written contexts by applying leadership and followership skills in work place and community.

Programme Specific Outcomes (PSO)

- PSO 1. Apply the knowledge of basic sciences relevant to physical education and Sports Sciences enable to use ICT in learning situation with good communication skills.
- PSO 2. Ability to identify actual requirements, analyze the complex skills related to physical education and sports sciences to employ critical thinking and efficient problem solving skills.
- PSO 3. Exhibit physically active lifestyle to understand and apply in physical education and sports that provides opportunities for employability and entrepreneurship skill competencies

B.Sc. Physical Education

Scheme of Instruction & Examinations
(for students admitted from 2023-2024 & onwards)

Part	Subject Code	Name of paper / Component	Hours of instruction/ week	Scheme Examination				
				Duration of exam	CIA	CE	Total	Credit
First Semester								
I	23BLT001/ 23BLH001/ 23BLF001	பொதுத்தமிழ்தாள் I - இக்காலஇலக்கியம் / Hindi - Prose and Non Detailed Texts / French I	2	3	50	50	100	2
	23BAEEC1	Ability Enhancement Compulsory Course - I English for Communication	4	3	50	50	100	4
	Generic Elective							
		Generic Elective -I	5+1/4+4	3	50	50	100	6
III	Discipline Specific Core Courses							
	23BPEC01	History and Foundation of Physical Education	4	3	50	50	100	4
	23BPEC02	Basic and Systemic Anatomy & Physiology	4	3	50	50	100	4
	23BPEC03P	Practical I- Indigenous Activities - I Kabaddi, Kho-Kho, Traditional games, Chess and Carrom	4	3	50	50	100	2
	23BPEC04P	Practical II - Combative Games - Boxing, Kick Boxing and Judo	4	3	50	50	100	2
IV	23BVBNC1 / 23BVBNS1 / 23BVBSP1	Skill Enhancement Course / Value Based Course Elective I / NCC/NSS/Sports Games - Practical	3/2 1	2	60	40	100	4/1/1
	Total							28/25
Second Semester								
I	23BLT002/ 23BLH002/ 23BLF002	பொதுத்தமிழ்தாள் II - அறஇலக்கியம் / Hindi - Grammar, Translation and General Essay / French II	2	3	50	50	100	2
	23BAEES1	Ability Enhancement Compulsory Course -II Environmental Studies	4	3	50	50	100	4
	Generic Elective							
	23BENGE2A/ 23BENGE2B/ 23BENGE2C/ 23BENGE2D	Generic Electives - II Introduction to Literature/ British Literature/ Modern Indian Literature/ New Literatures in English	5+1	3	50	50	100	6
III	Discipline Specific Core Courses							
	23BPEC05	Sports Psychology	4	3	50	50	100	4
	23BPEC06	Exercises Physiology	4	3	50	50	100	4
	23BPEC07P	Practical III - Racket Sports - Badminton, Ball Badminton, Tennis and Table Tennis	4	3	50	50	100	2

Typographical error. 2

Exercise physiology.

Chulthamani
017124

5/7/2024

	23BPEC08P	Practical IV - Indigenous Activities – II Yoga, Silambam, March Past, Calisthenics, Light Apparatus, Dands & Baithaks	4	3	50	50	100	2
IV	23BVBNC2 / 23BVBNS2 / 23BVBS2	Skill Enhancement Course / Value Based Elective Course I / NCC/NSS/Sports Games – Practical	3/2 1	2	60 -	40 -	100 -	4/1/1
Total								28/25
Third Semester								
I	23BLT003 / 23BLH003 / 23BLF003	பொதுத்தமிழ்தாள் III – சமய இலக்கியம் / Hindi - Ancient and Modern Poetry / French III	2	3	50	50	100	2
II	Generic Elective							
		Generic Elective - III	5+1/4+4	3	50	50	100	6
III	Discipline Specific Core Courses							
	23BPEC09	Fitness Training and Nutrition	4	3	50	50	100	4
	23BPEC10	Health Education	4	3	50	50	100	4
	23BPEC11P	Major Ball Games – (Volleyball, Handball, Basketball).	4	3	50	50	100	2
	23BPEC12P	Track and Field – Running and Jumping Events	4	3	50	50	100	2
IV	Skill Enhancement Courses							
	23BSBCS1	Skill Based Compulsory Course – I Communication Skill	4P	3	50	50	100	2
		Skill Based Course - II	4P	3	50	50	100	2
	23BVBNC3/ 23BVBNS3/ 23BVBS3	Value Based Elective Course – I NCC/NSS/Sports	3/2	2	60	40	100	4/1/1
		Value Based Elective Course –II	2		100	-	(Rem arks)	2
Total								30/27
Fourth Semester								
I	23BLT004 / 23BLH004 / 23BLF004	பொதுத்தமிழ்தாள் IV – சங்கஇலக்கியம் / Hindi - Introduction to Functional Hindi and Journalism / French IV	2	3	50	50	100	2
II	Generic Elective							
		Generic Elective – IV	5+1/ 4+4	3	50	50	100	6
III	Discipline Specific Core Courses							
	23BPEC13	Sports Training	4	3	50	50	100	4
	23BPEC14	Sports Management	4	3	50	50	100	4
	23BPEC15P	Major Ball Games – (Football, Baseball, Softball, Throwball)	4	3	50	50	100	2
	23BPEC16P	Track and Field – Running and Throwing Events	4	3	50	50	100	2

IV	Skill Enhancement Course								
	23BSBSS1	Skill Based Compulsory Course – III Soft Skill	4P	3	50	50	100	2	
		Skill Based Course - IV	4P	3	50	50	100	2	
	23BVBNC4/ 23BVBNS4/ 23BVBSP4	Value Based Elective Course– I NCC/NSS/Sports	3/2	2	60	40	100	4/1/1	
	Value Based Elective Course– III	2		100	-	100		Remarks	
Total								30/27	
Fifth Semester									
III	Discipline Specific Core Courses								
	23BPEC17	Kinesiology and Biomechanics	4	3	50	50	100	4	
	23BPEC18	Officiating and Coaching – I	4	3	50	50	100	4	
	23BPEC19P	Game of Specialization – I	4	3	50	50	100	2	
	23BPEC20P	Gymnastics, Weightlifting and Archery	4	3	50	50	100	2	
	Discipline Specific Elective Courses								
23BPEDE1 -6	DSE – I	4+4	3	50	50	100	6		
23BPEDE1 -6	DSE – II	4+4	3	50	50	100	6		
IV	Skill Enhancement Courses								
	23BVBNC5/ 23BVBNS5/ 23BVBSP5	Value Based Elective Courses – I NCC/NSS/Sports	3/2	2	60	40	100	4/1/1	
Total								28/25	
Sixth Semester									
III	Discipline Specific Core Courses								
	23BPEC21	Athletic Care and Rehabilitation	4	3	50	50	100	4	
	23BPEC22	Officiating and Coaching - II	4	3	50	50	100	4	
	23BPEC23P	Game of Specialization – II	4	3	50	50	100	2	
	23BPEC24P	Aerobics, Dance, Power Lifting and Martial Arts	4	3	50	50	100	2	
	Discipline Specific Elective Courses								
23BPEDE7-11	DSE – III	4+4	3	50	50	100	6		
23BPEDE12	DSE – IV – Project / Internship	2	3	50	50	100	6		
IV	Skill Enhancement Courses								
	23BVBNC6/ 23BVBNS6/ 23BVBSP6	Value Based Elective Courses – I NCC/NSS/Sports	3/2	2	60	40	100	4/1/1	
Total								28/25	
Over all Total								172 /	154

➤ **Ability Enhancement Compulsory Courses**

- English for Communication
- Environmental Studies

➤ **Skill Enhancement courses**, are Skill Based and / or Value Based which are aimed at providing hands on training, competencies, skills etc. and may be opted by the students from the electives offered by the departments or from SWAYAM MOOCs / NPTEL

Skill Based courses

- Skill Based courses I – 23BSBCS1 – Communication Skill during 3rd semester
- Skill Based courses III - 23BSBSS1 – Soft Skill during 4th semester
- Skill Based courses offered by Physical Education Department

S. No	Skill Based courses (II / IV)		Semester	Hours of Instruction	Credit/ Course
1.	23BPESE1	Inclusive Physical Education	3	4P	2
2.	23BPESE2	Movement Education			
3.	23BPESE3	Rhythmic Activities	4		
4.	23BPESE4	Traditional Games			
5.	23BPESE5	Sports and Recreation			

• **Value Based Elective Courses - Elective I**

Value Based Courses Elective I	Subject Code	Semester	No of .Credits
NCC/ NSS/ Sports	23BVBNC1-6/	1-6	24 Credits
	23BVBNS1-6/		6 Credits
	23BVBSP1-6		6 Credits

• **Value Based Elective Courses - Elective II / III offered by Physical Education Department for others**

Value Based Courses Elective II & III	Subject Code	Semester	Hours of Instruction	Credit / Course
1. Aerobics for Fitness 2. Self Defense 3. Yoga for Wellness	23BIDVB1/2/3	3&4	2 Hrs	2

➤ **Discipline Specific Elective Courses** should be related to their own core which may be from SWAYAM MOOCs / NPTEL also

- All the courses have 6 credits with 4 hours of theory and 4 hours of practicals or 5 hours of theory and 1 hour of Tutorials.

S. No.	DSE Courses		Semester	Hours of Instruction	Credits
				Theory + Practical / Theory + Tutorial	
1.	23BPEDE1	Sports Journalism	5	4+4	6
2.	23BPEDE2	Test and Measurement			
3.	23BPEDE3	Sports Entrepreneurship			
4.	23BPEDE4	Adapted Physical Education			
5.	23BPEDE5	Exercise Prescription			
6.	23BPEDE6	Gym Management			
7.	23BPEDE7	Counseling in Sports	6		
8.	23BPEDE8	Talent Identification			
9.	23BPEDE9	Sports Nutrition			
10.	23BPEDE10	Indian Knowledge System and Yoga			
11.	23BPEDE11	Sports Technology			
12.	23BPEDE12	Project / Internship		2	

➤ **Generic Elective Courses** offered for other disciplines / departments

- A Core Course offered in a Discipline / Subject may be offered as a Generic Elective for other departments.

S.No	Generic Elective Courses		Semester	Hours of Instruction	Credits
				Theory + Practical / Theory + Tutorial	
1.	23BPEGE1	Yoga and Stress Management	1	4+4	6
2.	23BPEGE2	Exercise and Weight Management			
3.	23BPEGE3	Youth Fitness			
4.	23BPEGE4	Indoor Games (Badminton, Table Tennis and Board Games)	3&4		

➤ **Ability Enhancement Compulsory Courses:**

- English for Communication
- Environmental Studies

** **Skill Enhancement courses i.e. Skill Based Courses and Value based courses Elective II & III,** may be opted by the students from the electives offered by the departments or from SWAYAM MOOCs / NPTEL.

***** Generic Electives** should be opted by the students, offered by other departments.

******Discipline Specific Elective Courses** should be related to their own core which may be from SWAYAM MOOCs /NPTEL also.

Total credits to earn the degree

1. Part I components – 8 Credits (Languages)
2. Part II components – 32 Credits (Ability Enhancement Compulsory Courses – 8 Credits, and Generic Elective Courses– 24 Credits)
3. Part III components – 96 Credits (Discipline Specific Core Courses – 72 Credits and Discipline Specific Elective Courses - 24 Credits)
4. Part IV components - Skill Enhancement Courses – 36/18 Credits (Skill Based Courses – 8, Value Based Courses Elective I (NCC/NSS/Sports) –24/6/6, Value Based Courses Elective II & III – 4)
5. **Minimum One Course should be from SWAYAM MOOCs/ NPTEL.**

One to 4 Courses may be from SWAYAM MOOCs/NPTEL for Credit Transfer in DSE, Generic Elective & / or Skill Enhancement Courses.

Kinesiology and Biomechanics

Semester V
23BPEC17

Hours of Instruction/week: 4
No. of Credits: 4

Objectives

- Learn the fundamental movement in sports
- Understand the Kinesiology and Biomechanical principles
- Helps in bringing the efficiency in movement

Unit-I Introduction to Kinesiology and Sports Biomechanics

Meaning and Definition of Kinesiology and Sports Biomechanics, Need and importance of Kinesiology and Biomechanics in sports and physical activities. 12

Unit-II Muscles and Joints

Introduction , meaning, muscular designing and kinesiological grouping , classification and types of muscles, different types of muscular contractions. Classification of bones, joints and body movements . Axis and planes for body movements. 12

Unit-III Origin, Insertion and Actions of Muscles

Muscles of Upper extremities : Trapezius, latissimus dorsi , Pectoralis major and minor, deltoid , Subscapularis, triceps, biceps, flexi carpi radialis , flexi carpi ulnaris ,rectus femoris rectus abdominalis , Muscles of lower extremities : Quadtriceps, Hamstring, Gastronemius, gluteus maximus, minimus and medius , soleus and plantaris muscles. 12

Unit-IV Kinetic and Kinematic concepts and analysis of human movement

Kinetic: Mass, inertia, pressure, density, torque, speed, velocity, acceleration, distance, Displacement Fluid resistance, buoyancy. Kinematic: motion, types of motion, factors influencing motion , Newton's law of motion, air gravity and water friction, force and its types, Centre of gravity, levers and its types, equilibrium and its types. Gait analysis and its applications to biomechanical principles. 12

Unit – V Qualitative and Quantitative Analysis

Application and analysis of biomechanical principles in Walking, Running, Throwing, Jumping, Pushing, Pulling, Hitting. Application and analysis techniques of different Games and Sports 12

Total Hours: 60

Course Outcomes:

1. Understand the Skeletal structure of human body by identifying the origin and insertion of various muscles .
2. Orient the students in basic structure and functions of primary joints of the body
3. Relate and interpret the role of various mechanical principles in human movements.
4. Know the effectiveness of human movement using mechanical principles.
5. Develop physical conditioning programs based on scientific principles designed to develop physical fitness and improve athletic performance .

Text Books:

1. VD Bindal, Textbook of Kinesiology
2. Ilona Gracie De Souza, Pavan Kumar G, Textbook of Biomechanics and Kinesiology
3. Ajay Vasant Rao Gulhane, Sports Biomechanics and Kinesiology

References:

1. Anthony J. Blazevich (2017). Sports Biomechanics: The Basics: Optimising Human Performance: Bloomsbury
2. Peter M. (2013), Biomechanics of Sport and Exercise: Human Kinetics
3. Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: Poompugur Pathipagam.
4. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.

Web Links:

1. <https://en.wikipedia.org/wiki/Kinesiology>
2. <https://edurev.in/t/99723/Revision-Notes--Kinesiology--Biomechanics>
3. https://books.google.com/books/about/Kinesiology_and_Biomechanics.

CO/ PO & PSO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3
CO 1	L	M	H	M	H	M	M	H	M
CO 2	M	H	M	H	H	M	M	M	H
CO 3	M	H	H	M	M	M	H	H	M
CO 4	H	M	M	H	H	H	M	M	H
CO 5	H	H	H	M	H	H	H	H	H

Officiating and Coaching - I

Semester: V
23BPEC18

Hours of Instruction/week: 4
No. of Credits: 4

Objectives

- Introduce students to rudiments of Officiating and Coaching
- Impart the basic knowledge about techniques, rules, and interpretations.
- Develop skills and competencies to organize school and university level games and sports

Unit-I Introduction of Officiating and coaching

Meaning and definition, Concept of officiating and coaching, Principles of officiating and coaching, Importance of officiating and coaching, Qualities and Qualifications of officials and coaches. 10

Unit-II Construction of Track and Field

Layout, dimensions and markings of 400mts and 200mts track, Field events : Jumping events and Throwing events 15

Unit-III Fundamental Techniques and Conditioning drills

Techniques and drills : Sprint events, MDR, LDR, Jumping events, Throwing Events, Hurdles, Relays, Race walk, Combined events, Steeplechase. 10

Unit – IV Rules and Interpretations

Sprint events, MDR, LDR, Jumping events, Throwing Events, Hurdles, Relays, Race walk, Combined events, Steeplechase. 10

Unit- V Duties of Officials and Coaches

Competition: pre meet, during meet and post meet work (conduct of model sports meet/officiate standard competitions), Philosophy of officiating and coaching, Ethics of officiating and coaching. 15

Total Hours: 60

Course Outcomes:

1. Understand the dimensions and measurements of the games and Athletics
2. Describe the rules and regulations of the games and Athletics
3. Apply the art of coaching the sports team
4. Able to organize and officiate the Track and Field events
5. Apply the concept of coaching and officiating.

Text Books:

1. Bunn,J.W. (1968).*The art of officiating sports*.Englewood cliffs N.J. Prentice
2. Hall.Bunn,J. W.(1972). *Scientific principles of coaching*.
3. Englewood cliffs N.J.Prentice Hall. Dyson,G.H.(1963).*The mechanics of athletics*. London: University of London Press Ltd.

References:

1. Dyson,G.H.(1963). *The mechanics of Athletics*. London: University of London Press Ltd.Lawther,J.D. (1965).
2. *Psychology of coaching*. NewYork:Pre.Hall.
3. Singer,R.N. (1972).*Coaching, athletic & psychology*. New York: M.C.Graw Hill.

Web Links:

1. https://ncjindalps.com/pdf/Health_Wellness/The-Sports-Rules-Book.pdf
2. http://media.heraldsun.com.au/PDF/2009/02/pafc-victoria/PAFC_Tip_BallGames_f.pdf
3. <https://www.britannica.com/sports/rackets>

CO/ PO & PSO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3
CO 1	L	H	H	L	M	L	-	M	H
CO 2	L	H	M	M	L	M	M	M	M
CO 3	M	M	M	H	M	H	M	M	H
CO 4	L	H	M	M	M	H	M	L	H
CO 5	M	H	H	M	H	M	M	H	H

Game of Specialization – I

Semester V
23BPEC19P

(Any two game of your choice)

Hours of Instruction/week: 4
No. of Credits: 2

Objectives

- Understand and apply various skills
- Promote knowledge and awareness of rules and regulation
- Enrich the knowledge officiating and Coaching techniques

Unit-I Basic Skills of the Game

Basic Warm Up – Offensive and Defensive skills - practice and perfection 12

Unit-II Dimension and Preparation of Playing area

Specification of Courts/ Playfields - construction - Marking methodology - techniques of marking 12

Unit-III Maintenance of Equipment and Play field

Watering – leveling – cleaning – maintenance of equipments etc. 12

Unit-IV Rules and Regulation of the game

Rules of the game – Rules of Play – Penalties – fouls etc. 12

Unit – V Officiating and Coaching of the Game

Advance skills- techniques – strategies – tactics – of officiating and Coaching 12

Total Hours: 60

Course Outcomes:

1. To Equip the students with the fundamental skills and knowledge to design his/ her own training program.
2. Aims to provide students with the basic sports science knowledge of the game of their specialization
3. Applying sports science knowledge in the game of specialization.
4. Application of basic techniques, rules and regulations of game of specialization.
5. Update the new rules and regulation for coaching and officiating.

Gymnastics , Weightlifting and Archery

Semester V
23BPEC20P

Hours of Instruction/week: 4

No. of Credits: 2

Objectives

- It requires focus, strength and determination
- To learn Fundamental skills and regulation of games and sports
- To Promote balance and co-ordination, Improve posture

Unit-I Introduction to Gymnastics

Introduction to gymnastics , Terminologies, Specific training and conditioning , Floor exercises :Splits, Cartwheel,. Front roll, Back roll, Handstand, Backbend , Pullover, Headstand, Split leap, Scissors leap, Field Layout. 10

Unit-II Introduction to Weight Lifting , Archery

Terminologies , Snatch (various phases of snatch)and clean and jerk - platform of weightlifting Archery - Terminologies , Proper stance, Body balance at the time of anchoring , Grip , Release pattern , field Layout 15

Unit-III Fundamental skills of the game

Drills for (weightlifting and Archery) , Floor Exercises , Balancing Beam , Vaulting Horse , Parallel Bar and Uneven Bar (Gymnastics) Rule and Regulations . 10

Unit-IV Various techniques and Lead ups

Fundamental techniques Archery basics Draw, Chin Anchor, Side anchor, Hold, Aiming, Alignment of string and sight, Release and Follow through . Lead ups for Archery and Weightlifting 10

Unit – V Officiating

Mechanism of Officiating , official signals and markings of score sheet . 15

Total Hours: 60

Course Outcomes:

1. The pass out would be able to lay-out and mark the dimensions of the platform
2. Students would be able to organize the concerned sports event and officiate in it.
3. Understand the rules of all the games and sports
4. Develop basic skills and techniques to improve their sports
5. Expertise Technically and ability in officiating

Text Books:

1. Rule Book of Games: Gymnastic (August 2018)
2. Archery Rules (23 June 2016)
3. The International Weightlifting Federation

References:

1. "The History of the International Powerlifting Federation"
2. International Weightlifting Federation. Retrieved 8 November 2015
3. Bertalan, Dan. Traditional Bowyers Encyclopedia: The Bowhunting and Bowmaking World of the Nation's Top Crafters of Longbows and Recurves, 2007. p. 73.

Web Links:

1. <http://www.indianarchery.info/>
2. https://en.wikipedia.org/wiki/Archery_Association_of_India
3. https://iwf.sport/wp-content/uploads/downloads/2020/01/IWF_TCRR_2020.pdf

CO/ PO & PSO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3
CO 1	L	H	M	M	H	L	M	E	L
CO 2	L	M	M	M	L	M	M	M	M
CO 3	M	M	L	L	M	M	L	M	M
CO 4	M	L	L	M	M	M	M	L	M
CO 5	M	H	H	M	M	M	M	M	M

Athletic Care and Rehabilitation

Semester VI
23BPEC21

Hours of Instruction/week: 4
No. of Credits: 4

Objectives

- Understand the underlying concepts of Athletic care and rehabilitation
- Apply various therapeutic modalities for various sports injuries
- To improve the quality of life of the player and increase his ability to carry out daily activities normally

Unit I Introduction to Athletic Care 10

Meaning and Definition of Athletic care and rehabilitation, Need and importance, Principles of Athletic care and rehabilitation.

Unit-II Corrective Physical Education 10

Definition and Objectives of Corrective Physical Education, posture and body mechanics, Standards of standing posture .Values of good Posture, Drawbacks and causes of Bad posture, Posture Test, Examination of the spine

Unit-III Posture and Rehabilitation Exercises 15

Normal Curve of the Spine and its Utility, Deviations in posture - Kyphosis , Lordosis, Flat Back ,Scoliosis, Round Shoulders, Knock Knee, Bowleg, Flat foot, causes for deviations and treatment including exercises. Passive, active, assisted, resisted exercises for rehabilitation

Unit-IV Massage

History of Massage, Classifications of Massage and its uses in the human body, Benefits of Massage, Massage an aid for Relaxation, Physiological, Chemical, Psychological Effects of Massage, Indication and Contra indications of Massage, Points to be considered in giving Massage. 15

Unit-V Sports Injuries Care, Treatment and Support:

Principles pertaining to the prevention of sports injuries, Care and treatment of exposed and unexposed injuries in sports, Therapeutic modalities : Exercise therapy, Electrotherapy(Shortwave diathermy, ultrasound, inferential therapy, muscle stimulator, traction), Hydrotherapy (Cryotherapy, Thermotherapy), Principles and techniques of strapping and bandages. 10

Total Hours: 60

Course Outcomes:

1. Understand the prevention treatment and rehabilitation of athletic injuries .
2. Demonstrate the basics of sport first aid during and after games situation .
3. Recognize and appropriately to treat common sports injuries and conditions from onset through rehabilitation
4. Identify and apply knowledge of anatomy to the design and execution of research studies.
5. Able to collect and analyse data in motor learning , exercise physiology or other sports medicines lab settings

Text Books:

1. Dr. Amandeep Singh Hardcover , January 2018, Athletic Care and Rehabilitation: Textbook of Physical Education M.P.Ed as per New Syllabus [Hardcover]- 1
2. Athletics Care And Rehabilitation .Author: Ajay V. Gulhane
3. Athletes Care and Rehabilitation (M.P.Ed. Physical Education) Sports Publication

References:

1. Doherty.J.Meno.Wetb,ModerD(2000)Track&Field,EnglewoodCliffs,PrenticeHallInc.
2. Lace, M.V.(1951)Massage and Medical Gymnastics, London: J&A Churchill Ltd.
3. Mc OoyandYoung(1954)Tests and Measurement, NewYork:Appleton Century.
4. Naro ,C.L.(1967)Manual of Massage and Movement, London:Febraand Febra Ltd.
5. Rathbome, J.I.(1965)Corrective Physical education, London : W.B .Saunders&Co

Web Links:

1. https://en.wikipedia.org/wiki/Sports_medicine
2. https://books.google.com/books/about/Athletic_Care_and_Rehabilitation.
3. https://www.academia.edu/20302331/Athletic_Injuries_and_Rehabilitation

CO/ PO & PSO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3
CO 1	M	H	M	M	M	M	H	M	H
CO 2	M	M	H	M	L	M	M	M	M
CO 3	H	M	M	M	H	M	M	H	M
CO 4	M	M	H	H	H	H	M	H	H
CO 5	H	H	H	H	M	H	H	H	H

Officiating and Coaching - II

Semester: VI
23BPEC22

Hours of Instruction/week: 4
No. of Credits: 4

Objectives

- Introduce students to rudiments of Officiating and Coaching
- Impart the basic knowledge about rules, officiating and coaching of games and sports.
- Develop skills and competencies to organize school and University level games and sports

Unit-I History and development of Major games (Volleyball, Basketball, Hockey, Football, Handball)/ Indigenous games (Kabaddi, Kho Kho, Throwball, Ball Badminton, Silambam)

History and development of Major games and Indigenous games.

10

Unit-II Construction of Courts and Fields

Layout, dimensions and markings of Major games and Indigenous games

15

Unit-III Fundamental Techniques and Conditioning drills

Techniques and drills: Major games and Indigenous games.

10

Unit-IV Rules and Interpretations

Major games and Indigenous games, Score sheet handling.

10

Unit – V Duties of Officials and Coaches

Competition: pre competition, during competition and post competition work (conduct of model sports day/officiate standard competitions).

15

Total Hours: 60

Course Outcomes:

1. Understand the dimensions and measurements of the games.
2. Describe the rules and regulations of the games.
3. Able to understand the role of a coach as a mentor.
4. Identify and implement risk management strategies for the well-being of athletes, spectators and Officials.
5. Apply the concept of coaching and officiating.

Text Books:

1. Prabha.R (2018), Fundamentals of Track and field.
2. J. Baker, DM Peters (2016) Routledge Handbook of Sports Expertise. Taylor and Francis
3. Englewood cliffs N.J.Prentice Hall.Dyson,G.H.(1963).*The mechanics of athletics*. London: University of London Press Ltd.

References:

1. Official Rule Book/ Handbook of the concerned federation of sports.
2. Hall.Bunn,J. W.(1972). *Scientific principles of coaching*.
3. Singer,R.N. (1972).*Coaching, athletic & psychology*. New York: M.C.Graw Hill.

Web Links:

1. https://ncjindalps.com/pdf/Health_Wellness/The-Sports-Rules-Book.pdf
2. <https://www.goodhousekeeping.com/life/parenting/g27287900/best-camping-games-activities/>
3. <https://en.wikipedia.org/wiki/Recreation>

CO/ PO & PSO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO 1	PSO 2	PSO 3
CO 1	L	H	H	L	M	L	-	M	H
CO 2	L	H	M	M	L	M	M	M	M
CO 3	M	M	M	H	M	H	M	M	H
CO 4	L	H	M	M	M	H	M	L	H
CO 5	M	H	H	M	H	M	M	H	H

Game of Specialization –II
(any two game of your choice)

Semester VI
23BPEC23P

Hours of Instruction/week: 4
No. of Credits: 2

Objectives

- To mastery in any two of the game of specialization
- Improve and update the knowledge of the game
- Gain practical knowledge in Coaching

Unit-I Skill Practice of the game.

Practicing the advance skill –lead up activities – practicing the Intramural 10

Unit-II Skill lessons of the game

Preparation - lesson plan - specific skills -game progressively 15

Unit-III Coaching lessons of the game.

Preparation of coaching lesson plan - game of their choice relevance 10

Unit-IV Advance coaching and training of the game

Advance training – tactics – techniques and leadup games – practice matches . 10

Unit – V Officiating of the game

Officiating the Intramural tournaments – Departmental matches – Qualifying officiating examination 15

Total Hours: 60

Course Outcomes:

1. Equip the students with the fundamental skills and knowledge to design his/ her own training program.
2. Aims to provide students with the basic sports science knowledge of the game of their specialization
3. Applying sports science knowledge in the game of specialization.
4. Application of basic techniques, rules and regulations of game of specialization.
5. Update the new rules and regulation for coaching and officiating

Aerobics , Dance , Power Lifting and Martial Arts

Semester VI
23BPEC24P

Hours of Instruction/week: 4
No. of Credits: 2

Objectives

- Increases cardio respiratory fitness
- Aids in the natural way of losing weight and keeping it off
- Helps control life's physical and emotional stresses

Unit-I Introduction of Aerobics.

Aerobics activities without music and equipment, Aerobics for fitness and health, Aerobics for mass demonstration, Aerobics with equipment and music. Steps : V step, L step, A step, Turn Step, Jass Square, Diamond , Clock Step, Grapewine, Slide, Hamcurl, Knee up, Touch Out, Step touch, Tap step, Lunges, Squats, Galloping, Mamboo and chacha. Human Kinetics involved in aerobics. **12**

Unit-II Indian Classical Dance (Basics)

Kathak, Bharatnatyam, Kuchipudi, Odissi, Manipuri and Kathakali **12**

Unit-III Power Lifting

History and Development of the powerlifting, Powerlifting for competition purpose and general purpose, Fundamental principles and procedure for power lifting, Team selection and coaching, Officiating & Referee/ Umpire/ scorer for self, employment, Starting own gym for self-employment **12**

Unit-IV Martial Arts (Kalari, Silambam)

Kalari ,Vattakaal , Neetakaal/ Nersuvadu , Koan suvadu , Koota suvadu, Othalaal suvadu, Saata Suvadu, Vadivu, Kaja vadivu , Simvara vadivu , Asva vadivu , Malsi vadivu , Maarjara vadivu , Varaaga vadivu, Kukooda vadivu, sarpa vadivu, Adavu 1, adavu 2 **12**

Unit – V Officiating and Coaching

Officiating of Aerobics, Advance coaching and training of Aerobics, Officiating of Power Lifting, Advance coaching and training of Power Lifting, Officiating in Kalari, Officiating in Silambam. **12**

Total Hours: 60

Course Outcomes:

1. Building stamina, strength, and flexibility.
2. Promoting self-discipline, building strength, flexibility, and agility, and instilling values of honor
3. Developing coordination and balance.
4. To gain knowledge and awareness about human Anatomy.
5. Increases the person's self confidence to the highest level.

Text Books:

1. Dan Austin, Bryan Mann, 2018 Powerlifting: The complete guide to technique, training, and competition
2. Devin Wilkey & Remyswamy Anbanandhan, 2008 Silambam – The Martial Art of Dravidian India . Nillaikalakki Publications
3. Jan Galen Bishop, Fitness through Aerobics (9th Edition) - Pearson Publishers 2013

References:

1. Aagaard P, Simonsen EB, Trolle M, Bangsbo J, Klausen K. (1994) Effects of different strength training regimes on moment and power generation during dynamic knee extensions. Eur J Appl Physiol 69: 382–386,
2. Issurin VB. (2010) New horizons for the methodology and physiology of training periodization. Sports Med 40: 189–206.
3. Theeboom M, De Knop P, Wylleman P. (2008) Martial arts and socially vulnerable youth. An analysis of Flemish initiatives. Sport Educ Soc. 13:301–18.
4. McKenzie, T. L. (2007). The preparation of physical educators: A public health perspective. Quest, 59(4), 345–35

Web Links:

1. <https://www.sundried.com/blogs/training/what-is-powerlifting?currency=GBP>
2. <https://www.jagranjosh.com/general-knowledge/>
3. <https://my.clevelandclinic.org/health/articles/7050-aerobic-exercise>