# SIDDHARTH UNIVERSITY KAPILVASTU, SIDDHARTHNAGAR

# **Department of Physical Education**



Syllabus as per Common Minimum Syllabus for U.P. State Universities and Colleges

# PHYSICAL EDUCATION –at U.G. level (for B.A. / B.Sc.)

To be implemented from Session 2021-22

# COURSE STRUCTURE FOR MAJOR SUBJECT PHYSICAL EDUCATION – at U.G. level (for B.A. / B.Sc.)

YEAR	COURSE CODE	COURSE TITLE	CREDITS	
10		Semester – 1		
	PE 001	An Introduction to Physical Education	2+0	
	PE 101 (E020101T)	Elements of Physical Education	4+0	
First Year	PE 102 (E020102P)	Fitness and Yoga	0+2	
		Semester – II		
	PE 103 (E020201T)	Sports Organization And Management	4+0	
	PE 104 (E020202P)	Sports Event and Track & Field	0+2	
	T	0 1		
	DE 401	Semester – III		
	PE 201 (E020301T)	Anatomy & Exercise Physiology	4+0	
	PE 202 (E020302P)	Health and Physiology	0+2	
Second	Semester – IV			
Year	PE 203 (E020401T)	Sports Psychology and Recreational Activities	4+0	
	PE 204 (E020402P)	Sports Psychology	0+2	
	I	Semester – V		
	PE 301 (E020501T)	Athletic Injuries and Rehabilitation	4+0	
	PE 302 (E020502T)	Kinesiology and Biomechanics in Sports	4+0	
	PE 303 (E020503P)	Rehabilitation & Sports	0+2	
Third	PE 304 (E020504P)	Research Project	0+3 (Qualifying)	
Year		Semester – VI		
	PE 305 (E020601T)	Research Methods	4+0	
	PE 306 (E020602T)	Physical Education for Divyang	4+0	
	PE 307 (E020603P)	Research and Sports	0+2	

PE 308	Research Project	0+3
(E020604P)	·	(Qualifying)

#### PROGRAMME SPECIFIC OUTCOMES:

- PSO1 :The students will be able to understand the basic and practical aspects of Physical Education, Yoga and Sports.
- PSO2 :The students will be able to understand the biological, psychological, physical, health and functional aspects of human body.
- PSO3 :This program aims to enable the students to understand and develop the mental & physical ability, management skills, leadership quality, health planning, event management, sports budgeting, physiological understanding, teaching methods, sports psychology and research orientation in physical education.
- PSO4 :After completing this program the students will definitely be able to successfully discharge their duties and responsibilities towards themselves and society.
- PSO5 :This course also aims for the physical and sports skill development that may help for higher studies in physical education and may lead him/her to make a career in physical education and sports industry.

#### SEMESTER I - PAPER I

Cours	e Code: PE 001	Year: First	Semester: First
	Course Title: An	Introduction to Physical Educa	ation
Course	Outcomes:		
	tudents will learn the introduction		tion, relationship of Physical
	Education with fitness, wellness a		
	he student will also learn about the		
	this course student will also lea		
Unit		Topics	Credits
	Physical Education:		
I	<ul> <li>Need and Importance of</li> </ul>	Physical education in Modern E	Era. 2+0
	<ul> <li>Relationship of physical</li> </ul>	education with general education	on.
	<ul> <li>Scientific Basis of Physic</li> </ul>	al Education.	
	Yoga and Physical Education:		
	<ul> <li>Relationship of Yoga wit</li> </ul>	h mental health and value educat	ion.
	Relationship of Yoga with	h Physical Education and Sports.	
	Concept of Fitness and Wellne	ss:	
	Meaning and Importance	e of Fitness and Wellness.	
	<ul> <li>Factor Affecting Fitness</li> </ul>	and Wellness.	
	Fit India Movement		

- Singh, Ajmer, Physical Education and Olympic Abhiyan, "Kalayani Publishers", New Delhi, Revised Addition, 2006
- 2. Patel, Shri krishna, Physical Education, "Agrawal Publishers", Agra, 2014-15
- 3. Pandey, Preeti, Sharirik Shiksha Sankalan, "Khel Sanskriti Prakashan, Kanpur
- 4. Kamlesh M.L., "Physical Education, Facts and foundations", Faridabad P.B. Publications.
- 5. B.K.S. Yengar, Light and Yog: Yoga Deepika, George Allen of Unwin Ltd., London, 1981.
- 6. BrajBilari Nigam, Yoga Power ;The path of Personal achievement; Domen and Publishers, New Delhi, 2001.
- Indira Devi, Yoga for You, Gibbs, Smith Publishers. Salt Lake City, 2002 Domen and Publishers, New Delhi -2001.
- 8. Jack Peter, Yoga Master the Yogic Powers, Abhishek Publications, Chandigarh, 2004.
- 9. Janice Jerusalim, A Guide To Yoga, Parragon Dath, Baiihe-2004.

Course code: PE 101 (E020101T)

#### SEMESTER I - PAPER II

Year: First

Semester: First

	Course'	Fitle: Elements of Physical Education	
Course Ou	itcomes:		
		y wide concept and this course teaches ab	out introduction and
	cal concept of physica		201 - 0
		velopment of physical education in India and	
		general concept of good health and wellne	
	the student to promot	e healthy way of living by developing fitnes	
Unit		TOPICS	Cred
	Ancient Wisdom in	Physical Education, Sports and Yoga:	
	Patanjali Yog	a Sutra.	
	Ancient and 7	raditional Games of India.	4+0
	Meaning, definition and concept of physical education.		
I	Aims and obj	ectives of Physical education.	
II.	History of Physical	Education:	
	<ul> <li>History and</li> </ul>	development of Physical education in India	
II	History of p	hysical education in ancient Greece and Ro	ome.
	Sociological Found	ation of Sports:	
	Meaning, De	efinition and importance of Sports Sociolog	y.
III	Culture and	sports.	
	<ul> <li>Socialization</li> </ul>	and sports.	
	Olympic Movement	:	erser er er en lænkerst
		ovement: Ancient Olympic Games, Moder	n Olympic
IV		s and Objectives of Olympic Games.	
	Olympic Spi	rit, Olympic Torch, Olympic Flag, Olympic I	Motto.
	L.	manufacture and the state of th	

	Health Education:	
	Meaning, Definition, Objectives, Principles and Importance of	
	Health Education, Dimensions of Health.	
La	Food and Nutrition - Essential nutrients & their functions, Balanced	
$\mathbf{V}$	diet, Health and Drugs	
	<ul> <li>Internationals health agencies- WHO, UNICEF, Red Cross Society.</li> </ul>	
	Wellness and Life Style:	
	<ul> <li>Importance of Wellness and Active Lifestyle.</li> </ul>	
VI	<ul> <li>Role of Physical Activities in maintaining healthy Lifestyle.</li> </ul>	
	<ul> <li>Causes and Health problems associated with Stress &amp; Obesity.</li> </ul>	
,	Fitness:	
	<ul> <li>Meaning, Definition and types of fitness.</li> </ul>	
VII	<ul> <li>Components of Fitness.</li> </ul>	
	Tests of Physical Fitness.	
	Posture:	
	<ul> <li>Meaning &amp; Definition of Posture.</li> </ul>	
VIII	Importance of Good Posture.	
A 111	Causes of Bad Posture.	
	Common Postural Deformities.	

- 1. Swasthya Evam Sharirik Shiksha by Dr. Rajesh Pratap Singh, by Rishab Books New Delhi
- 2. Sharirik Shiksha ki Adhunik Prawatiya by Dr. Rajesh Pratap Singh, by University publication, New
- Uppal AK & Gautam GP (2008). Health & Physical Education. Friends Publication. New Delhi
- Balayan D (2007). Swasthya Shiksha Evam Prathmik Chikitsa. Khel Sahitya. Delhi.
- 5. Barrow Harold M., "Man and movements principles of Physical Education", 1978.
- 6. Difiore, J. (1998). Complete guide to postnatal fitness. London: A & C Black,
- 7. Dynamics of fitness. Madison: W.C.B Brown.
- Sharirik Shiksha, Dr. Rajesh Pratap Singh, Yogesh Kumar & Suneel Kumar by Khel Shahitay Kendra, New Delhi
- 9. Giam, C.K &The, K.C. (1994). Sport medicine, exercise and fitness. Singapore: P.G. Medical Book. Mcglynn, G., (1993)
- 10. Kamlesh M.L., "Physical Education, Facts and foundations", Faridabad Publications
- 11. Krishana Murthy V. and Paramesara Ram, N. "Educational Dimensions of Physical. Education", 2nd Revised edition, Print India, New Delhi 1990.
- 12. Ravanes R.S., "Foundation of Physical Education", Houghton Millin Co. Boston USA (1978)
- Sharkey, B. J. (1990). Physiology of fitness, Human Kinetics Book.
   Track & Field. by Gerhardt schmolinsky, Leipzig college of physical culture (DHFK)
- 15. Fitness and Health Education, by Dr. Rajesh Pratap Singh, Shree Publisher and Distributer, New Delhi.
- 16. Health Education, Hygeine, First Aid & Sports Injuries by Dr. Neeraj Pratap Singh & Dr. Ajay Dubey, Sports Publication, New Delhi.

#### SEMESTER I - PAPER III

Course Cod	e: PE 102 (E020102P)	Year: First	Semester: First
ı	Course	Title: Fitness and Yoga	
Course Ou			
	nderstand the basic practical c		
10.000	in the basic knowledge about thods.	Physical conditioning through	gh various fitness work-out
• To le	arn and understand Yogasana	s and Pranayama.	
Unit		Topics	Credits

Unit	Topics	Credits
I I	Part-A	
I	Introduction to Physical Fitness:  • Learn and demonstrate the techniques of warm-up, general exercise and cooling down  • Learn and demonstrate physical fitness through aerobics, circuit training and calisthenics.  • Diet chart & measurement of BMI	0+2
	Part-B	
	Introduction of Yoga:	
	<ul> <li>Practical aspect of yoga.</li> <li>Types, scope &amp; importance of yoga.</li> </ul>	
	Asanas:	
П	<ul> <li>Surya-namaskar, Bhujang asana, Naukasana, Halasana, Vajrasan, Padmasana, Shavasana, Makrasana, Dhanurasana, Tadasana.</li> </ul>	
	Pranayama:	
	<ul> <li>Difference and classification of pranayama.</li> </ul>	
	<ul> <li>Difference between pranayama and breathing.</li> <li>Anulom-Vilom.</li> </ul>	

#### Suggested Readings:

- 1. ACSM's Guidelines for Exercise Testing and Prescription (2001), American Collegeof Sports Medicine, New York, U.S.A.
- 2. Anspaugh, D.J., G. Ezell and K.N. Goodman (2006) Teaching Today Health, Mosby Publishers, Chicago (USA
- 3. Donatelle, R.J. and Ketcham P. (2007). Access to Health, Benjamin Cummings, Boston, USA.
- Flyod, P.A., S.E. Mimms and C. Yelding (2003) Personal Health: Perspectives and Lifestyles, Thomson, Wadsworth, Belmont, California, USA.
- 5. Sharma JP (2007). Manav jeevan evam yoga. Friends Publication. New Delhi.
- 6. Sharma Jai Prakash And Sehgal Madhu(2006). Yog-Shiksha. Friends Publication. Delhi.
- 7. Singh MK and Jain P (2008). Yoga aur manoranjan. Khel Sahitya Kendra. New Delhi.
- 8. Vyas SK (2005). Yog Shiksha Khel Sahitya Kendra. Delhi.

# SEMESTER II - PAPER I

Course code: PE 103 (E020201T)	Year: First	Semester: Second
Course Title: Spor	rts Organization and Man	agement

#### Course Outcomes:

- This course is designed to give exposure to students in understanding the planning, organising and implementation aspects of sports events.
- The students will also learn about store management, purchasing of material, budget making and career avenues in physical education.

Unit	Topics	Credits
I	Introduction:  Meaning, concept and definition of sports management.  Aims and objectives of sports management.	4+0
II	Event Management	
Ш	<ul> <li>Budget Part - A</li> <li>Meaning, Definition, Preparation of Budget.</li> <li>Principles of making Budget</li> <li>Qualities of a good Budget.</li> </ul>	
IV	Budget Part - B  The Budget Cycle and Budget Preparation Format.  Preparing the Departmental Financial Plan and estimate.  Expenditure management.	
V	<ul> <li>Organization</li> <li>Meaning and definition of Organization.</li> <li>Need and importance of Organization.</li> <li>Structure and functions of S.A.I., University Sports Council and A.I.U.</li> </ul>	
VI	<ul> <li>Supervision</li> <li>Meaning and Definition of Supervision</li> <li>Principles and Methods of Supervision</li> <li>Role of a coach/manager.</li> </ul>	
VII	<ul> <li>Facilities &amp; Equipment</li> <li>Procedure to purchase sports goods and equipments.</li> <li>Care and maintenance of Equipments.</li> <li>Stock entry, Consumable and Non- Consumable sports goods</li> </ul>	

VIII	Job Opportunities	
	<ul> <li>Job Opportunities in Physical Education and Sports.</li> </ul>	
	<ul> <li>Career avenues and professional preparation.</li> </ul>	
	Clients and Sponsorship.	

- Bucher, Charles A. and Krotee, March L., "Management of Physical Education and Sport," MC Grow Hill publication, New York (US) 2002
- 2. Hert, Renis(1961) New Patterns of Management, McGraw Hill,.
- Horine, Larry," Administration of Physical Education and Sport programs. WM-C BrownPublishers Dubuque (US) 1991
- 4. Kotler, P and G Allen, L.A. (1988) Management & Organization. Kogakusha Co. Tokyo.
- 5. Parkhouse, Bonnie L., "The management of Sports is foundation and application," Mosby publication, St. Louis (US), 1991
- 6. Sandhu, K. Sports Dynamics: Psychology, Sociology and Management.
- Sivia, G.S (1991). Sports Management in Universities, New Delhi: A.I.U. Deen Dayal Upadhyaya Marg. 2005)
- Adhunik Khel Prabhandhan Evam Parshikshan by Dr. Rajesh Pratap Singh, University Publication, New Delhi.
- Sharirik Shiksha: Vidhyalaya Prashashan, by Dr. Rajesh Pratap Singh, University Publication New Delhi.

#### SEMESTER II - PAPER II

Course Code:	PE 104 (E020202P)	Year: First	Semester: second
	Course Title: 8	Sports Event and Track &	& Field
	ourse is designed to train the		ation and organising competitions.
Unit	ones.	Topics	Credi
		Part-A	0+2
ī	<ul> <li>To organize Intran</li> <li>To prepare a budg</li> <li>Make a Sample Ti</li> <li>Prepare the list of</li> </ul>	r organizing an event. nural Competition. et plan for interclasscompe me Table for college. Consumable and Non-Con V curriculum vitae/ Coveri	sumable items.

Part-B

ŀ	Track & Field:
	History.
	<ul> <li>Measurements.</li> </ul>
п	<ul> <li>Marking.</li> </ul>
••	Rules.
	Officials.
	<ul> <li>World and National Records.</li> </ul>

- 1. Parkhouse, Bonnie L., "The management of Sports it's foundation and application," Mosby publication, St.Louis (US), 1991
- Bucher, Charles A. and Krotee, March L., "Management of Physical Education and Sport," Mc Graw Hill publication, Now York (US) 2002
- 3. Horine, Larry," Administration of Physical Education and Sport programs. WM-C Brown Publishers Dubuque (US) 1991
- 4. Hert, Renis(1961) New Patterns of Management, McGraw Hill,.
- 5. Sandhu, K. Sports Dynamics: Psychology, Sociology and Management.

#### SEMESTER III - PAPER I

Course Code: PE 201 (E020301T)	Year: Second Semester: Third					
Course Title	e: Anatomy and Exercise	Physiology				
Course outcomes:						
<ul> <li>To understand the importance, s</li> </ul>	cope and need of Anatomy	& Physiology in the field of				

- To understand the importance, scope and need of Anatomy & Physiology in the field of physical education and sports.
- To understand the basic structure and functions of various systems of the Human body.
- To understand anatomical and physiological effects of physical exercises on human body and on its various systems.

Unit	Topics	Credits
I	<ul> <li>Introduction:</li> <li>Meaning, Definition and Importance of Anatomy and Physiology in the field of Physical Education &amp; Sports</li> <li>Brief introduction of Cell, Tissues, Organs and various systems of human body.</li> </ul>	4+0
II	Skeletal System:  • Structural classification of bones.  • Types of joints and major movements around them.  • Functions of Skeletal System.	
Ш	<ul> <li>Muscular System:</li> <li>Classification, Structure and functions muscles.</li> <li>Major group of muscles.</li> <li>Effects of Exercise on Muscular and Skeletal System.</li> </ul>	

IV	Circulatory System:  Structure and functions of human heart.  Blood pressure, cardiac output, Athlete's heart.  Functions of Blood and Mechanism of Blood Circulation.  Effects of exercise on Circulatory system.	
v	Respiratory System:  Organs, Structure and functions of respiratory system  Effects of exercise on respiratory system.	
VI	Digestive System:  Organs, Structure and functions of digestive system  Mechanism of Digestive System.	
VII	Excretory and Nervous System:  Structure and functions of Kidney, Functions of Skin.  Parts and Functions of Nervous System.  Effects of Exercise on Nervous System.	
VIII	General Physiological Concepts:  • Vital Capacity-VC  • Second Wind  • Oxygen Debt  • Fatigue	

- ACSM's Guidelines for Exercise Testing and Prescription (2001), American College of Sports Medicine, New York, U.S.A.
- Anspaugh, D.J., G. Ezell and K.N. Goodman (2006), Teaching Today Health, Mosby Publishers, Chicago (USA
- 3. Donatelle, R.J. and Ketcham P. (2007), Access to Health, Benjamin Cummings, Boston, USA.
- 4. Flyod, P.A., S.E. Mimms and C. Yelding (2003), Personal Health: Perspectives and Lifestyles, Thomson, Wadsworth, Belmont, California, USA.
- Goldberg, L. and D.L. Elliot (2000), The Healing Power of Exercise, National Health & Wellness Club, New York, U.S.A.
- 6. Jain, J. (2004), Khel Dawaon Ka (New Delhi: Delhi University Press).
- 7. Robbins, G., D. Powers and S. Burgess (2002), A Wellness Way of Life, McGraw Hill, New York, USA
- 8. Schindler, J.A. (2003), How to Live 365 Days a Year (Boston: Running Press).
- 9. Koley, Shyamal (2007), Exercise Physiology A Basic Approach (New Delhi: Friends Publications).
- 10. Jain AK (2002), Anatomy & Physiology for Nurses. Arya Publishers, Delhi.
- 11. Moried EN (2007), Essential of Human Anatomy & Physiology. Ed. 8th Dorling Kindersley, India.
- 12. Prives M and Others (2004), Human Anatomy Vol. I & II Paragon, Delhi.
- 13. Seeley & Others (2008), Anatomy & Physiology. McGraw Hill, Boston.
- Tortora (2003), Principles of Anatomy & Physiology, New York: John Willy & Sons. 15. William CS (2000).
- 15. Wilson and Waugh (1996), Anatomy & Physiology in Health & Illness. Churchill Livingstone

#### SEMESTER III - PAPER II

Course Code: PE 202 (E020302P)	Year: Second	Semester: Third
Cour	se Title: Health and Phy	ysiology

#### **Course Outcomes:**

 To understand the human body structure by means of preparing charts, models and learning human body measurement skills.

• To gain knowledge of First Aid and Rehabilitation through practical demonstration.

Unit	Topics	Credits
	Part-A	
ī	<ul> <li>Draw a labeled diagram of any two-body systems.</li> <li>Prepare a Model of any one System of human body.</li> <li>Learning of measuring height, weight, waist circumference and hip circumference and Waist-Hip ratio.</li> <li>Learn to Measure Blood Pressure using Sphygmomanometer.</li> </ul>	0+2
	Part-B	
П	First Aid & Rehabilitation  Definition of first aid, DRABC of first aid. First aid for hemorrhage, fractures, Sprain and Strain. PRICER School Health Card, First Aid facilities. Types of Rehabilitation.	

#### Suggested Readings:

- 1. Jain, J. (2004), Khel Dawaon Ka (New Delhi: Delhi University Press).
- 2. Robbins, G., D. Powers and S. Burgess (2002), A Wellness Way of Life, McGraw Hill, New York, USA.
- 3. Koley, Shyamal (2007), Exercise Physiology A Basic Approach (New Delhi: Friends Publications).
- 4. Jain AK (2002), Anatomy & Physiology for Nurses. Arya Publishers, Delhi.
- 5. Moried EN (2007), Essential of Human Anatomy & Physiology. Ed. 8th Dorling Kindersley, India.
- 6. Prives M and Others (2004), Human Anatomy Vol. I & II Paragon, Delhi.
- 7. Seeley & Others (2008), Anatomy & Physiology. McGraw Hill, Boston.
- 8. Health Education, Hygiene, First Aid & Sports Injuries by Dr. Neeraj Pratap Singh & Dr. Ajay Dubey, Sports Publication, New Delhi.

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# SEMESTER IV - PAPER I

Course Code: PE 203 (E020401T)	Year: Second	Semester: Fourth
Course Title: Spo	rts Psychology And Rec	creational Activities

## Course outcomes:

- To access and understand the basic concepts of Psychology in the field of physical education and sports.
- To understand the relation between psychological concepts and human behavior during physical and sports performance.

• To understand the meaning and importance of Play, Recreation and Traditional games.

Unit	Topics	Credits
I	<ul> <li>Introduction:</li> <li>Meaning, Importance and scope of Sports Psychology</li> <li>Growth and Development.</li> <li>Psycho-physical Unity of Human behavior.</li> </ul>	4+0
11	Learning:  Nature of learning, brief introduction to theories of learning.  Laws of learning, plateau in learning, transfer of Learning.	
Ш	<ul> <li>Motivation:</li> <li>Nature &amp; Types of motivation, factors influencing motivation.</li> <li>Motivational techniques and their impact on sports performance.</li> </ul>	
IV	Personality:  Meaning and definition of personality, characteristics of personality.  Dimensions of personality, personality and sports performance.	
v	Anxiety And Aggression:      Meaning and nature of anxiety, types of anxiety.      Aggression and sports.      Anxiety, stress, arousal and their effects on sports performance.	
VI	Play:  Meaning and Definition of Play.  Importance and functions of Play.  Relationship between Learning and play.	
VII	Recreation:      Meaning and importance of recreation in physical education.      Principles of recreation in physical education.      Classification and ways of recreation.	

	Traditional Games:	
VIII	<ul> <li>Meaning and Types of Traditional Games.</li> </ul>	
VIII	<ul> <li>Importance and Benefits of Traditional Games.</li> </ul>	
	<ul> <li>Mental and Physical development through Traditional Games.</li> </ul>	

- 1. Alliance, A. (1999), Physical Best Activity Guide, New Delhi,
- Capel, S. et al Editors (2006), A Practical Guide to Teaching Physical Education. Routledge Publishers, USA.
- 3. Dheer, S. and Radhika. (1991), Organisation and Administration of Physical Edu., ND: Friends Pub.
- 4. Frost, R.B. and Others. (1992), Administration of Physical Education and Athletics, UniversalBook:
- 5. Gangwar, B.R. (1999), Organisation Admn. & Methods of Physical education, Jalandhar: A.P. Pub.
- Gupta R. Kumar P. & Sharma D.P. (1999), Lesson Plan in Physical Education & Sports. R.D.P. Publication. New Delhi.
- Gupta R. Kumar P. & Tyagi S. (2008), Textbook on Teaching Skill & Prowess. Part I & Friends Publication. India. New Delhi.
- 8. Kamlesh ML (2005), Methods in Physical Education. Friends Publication. Delhi.
- 9. Kamlesh ML (2005), Sharirik Shiksha Ki Vidiyan Friends Publication. Delhi.
- 10. Pandey Laxmikant (1996), Sharririk Shiksha Ki Shiksha Padati. Metropolitan Book. New Delhi.
- Shaw D & Kaushik S (2001,) Lesson Planning- Teaching Methods and Classman in Physical Education. K.S.K. Delhi.

# SEMESTER IV- PAPER II

Course Code:	PE 204 (E020402P)	Year: Second	Semester: Fourth	
	C	ourse Title: Sports Psyc	hology	The second
	derstand and learn the me	asurement and assessment	techniques of important psych of coordinative abilities of hu	) <del>(=</del> )
Ont		Part-A		Credits
I	Assessment of Spo     Measurement of Motivation)		y Profile ivation and Achievement	0+2
		Part-B		
11	<ul> <li>Reaction Time.</li> <li>Hand eye co-ordin</li> <li>Foot-Eye Coordin</li> <li>Hand-Foot - Eye C</li> <li>Team Building Ga</li> </ul>	ation. Coordination.		

- 1. Cratty, Braynat. J., (1973) Movement Behavior and Motor Learning, Philadelphia: Lea and Febiger, Edn.
- Magill, Richard A (1993) Motor Learning Concepts and Application, 4<sup>th</sup>ed WCB Brown and Benchmark Publishers.
- 3. Passer, M.W., Smith, R.E., Holt, N. and Bremner, A. (2008). Psychology: The Science of Mind and Behaviour.McGraw-Hill Education.UK.
- 4. Oxendine, J.B. (1968) Psychology and Motor Learning, Englewood cliffs, New Jersey.
- 5. Cratty, B.J. (2000) Psychology of Contemporary sports, Human Kinetics Publishers, Champaign Ilinois.
- 6. Carron, A.V., Hausenlas, H.A. Mark Eys (2005) Group Dynamics in Sport, organtown, WV: Fitness Information Technology, INC, US.
- 7. Cronbach J. Lec (1990) Essentials of Psychological Testing (Harper Colins Publishers).

#### SEMESTER V - PAPER I

Course Code	e: PE 301 (E020501T)	Year: Third	Semester: Fifth	
	Course Title:	Athletic Injuries	and Physiotherapy	
Course out	comes:			Hesse Wee Africalis — Alver Associa
	lents will be able to understated to them.	and about the com	non and special sports injuries	and first aid
	lents will be able to learn the edial treatments.	e significance of p	osture, posture related deformi	ties and their
<ul> <li>Stud</li> </ul>	ents will also learn different as	pects of massage an	d Rehabilitation.	
Unit		Topics		Credit
Ī	Athletic Injuries and Athl  Concept and Significa  Factors causing Injuri  General Principles of	ance of Athletic Caies.		4+0
П		wer Back Pain, Te	nnis Elbow, Shin Pain. n, Hematoma, Fracture,	
ш	Postural Deformities:  Causes and respective Kyphosis.  Lordosis.  Knock Knees.	e corrective exerci	ses of:	

	Rehabilitation
	RICE- Rest, Ice, Compression, Elevation.
IV	<ul> <li>DRABC- Danger, Response, Airways, Breathing, Circulation.</li> </ul>
c# 18 <sub>0</sub>	Bandage
	<ul> <li>Types of Bandages.</li> </ul>
	Taping and Supports.
	Physiotherapy
V	<ul> <li>Definition and Guiding principles of physiotherapy.</li> </ul>
	Importance of physiotherapy.
	Hydrotherapy-
X 7 T	<ul> <li>Meaning and Methods of Hydrotherapy.</li> </ul>
VI	<ul> <li>Brief introduction of Cryotherapy, Thermotherapy, Contrast bath,</li> </ul>
	Steam bath, Sauna bath, Hot Water Fomentation.
	Massage
	<ul> <li>Meaning and Types of Massage.</li> </ul>
VII	Contradictions of Massage.
	Importance of Massage in Rehabilitation and Sports.
	Therapeutic Exercises:
VIII	<ul> <li>Meaning, Definition and Importance of Therapeutic Exercises.</li> </ul>
V 111	Muscle Strengthening through Active and Passive Exercise.

#### Recommended Readings:

- ACSM's Guidelines for Exercise Testing and Prescription (2001), American College of Sports Medicine. New York, U.S.A.
- 2. Donatelle, R.J. and Ketcham P. (2007), Access to Health, Benjamin Cummings, Boston, USA.
- Fahey, T.D., M.P. Insel and W.T. Rath (2006), Fit & Well: Core Concepts and Labs in Physical Fitness, megraw Hill, New York.
- Flyod, P.A., S.E. Mimms and C. Yelding (2003) Personal Health: Perspectives and Lifestyles, Thomson, Wadsworth, Belmont, California, USA.
- Hoeger, W K and S.A. Hoeger (2004). Principles and Labs for Fitness and Wellness, Thomson Wadsworth, Belmont, California, USA.
- 6. Jain, J. (2004) Khel Dawaon Ka (New Delhi: Delhi University Press).
- Kumari Sheela S. Rana, Amita, and Kaushik Seema, (2008), Fitness, Aerobics and GymOperations, Khel Sahitya, New Delhi.
- 8. Pande, P. K. (1987) Outline of Sports Medicine, New Delhi: Jaypee Brothers.
- 9. Roy, Steven and Richard, Irvin (1983) Sports Medicine, Benjamin Cummings, Boston, USA.
- 10. Schindler, J.A. (2003) How to Live 365 Days a Year, Boston: Running Press.
- 11. Sports Medicine by Dr. Neeraj Pratap Singh, Khel Shahitya Kendra, New Delhi.

#### SEMESTER V - PAPER II

Course Code: PE 302 (E020502T)	Year: Third	Semester: Fifth

# Course Title: Kinesiology and Biomechanics in Sports

# Course outcomes:

- Students will be able to understand various aspects of Kinesiology and Biomechanics in Sports and able to apply them in sports activities.
- Students will learn about the locomotion aspects of Human body.

 Students will be able to understand the various mechanical principles and their applicability in different sports situations.

Unit	Topics	Credits		
I	Introduction:  • Meaning, Definitions, Aims & Objective of Kinesiology.  • Importance of Kinesiology for games and sports.	4+0		
11	<ul> <li>Fundamental Movements of Human body.</li> <li>Center of Gravity.</li> <li>Line of Gravity.</li> </ul>			
Ш	<ul> <li>Axis and Planes.</li> <li>Types of Muscle Contraction.</li> </ul>			
IV	Major Muscles at Various Joints:  Upper extremity – shoulder girdle, shoulder joint, elbow joint.  Lower extremity – Hip joint, knee joint, ankle joint.  Major muscles of Neck and Torso			
V	Motion:  • Newton's Laws of Motion  Friction:  • Meaning, Definitions and Types.			
VI	Force:  • Meaning, Definition & Types of Force.  • Application of force in sports activities.  Levers:  • Meaning & Definition of Levers.  • Uses of Lever in the Human body movements and sports activities.			
VII	<ul> <li>Kinematics:</li> <li>Meaning of Kinematics.</li> <li>Types- Linear and Angular.</li> <li>Meaning of Speed, Velocity, Acceleration, Distance &amp; Displacement</li> </ul>			
VIII	<ul> <li>Kinetics:</li> <li>Meaning of Kinetics</li> <li>Types- Linear and Angular.</li> <li>Meaning of Mass, Weight, Momentum and Pressure.</li> </ul>			

#### Recommended Readings:

- 1. Bartlett, R. (2007), Introduction to Sports Biomechanics. Routledge Publishers, USA.
- 2. Blazevich, A. (2007), Sports Biomechanics, A & C Black Publishers, USA.
- 3. Breer & Zarnicks (1979), Efficiency of human movement. WIB Sounders Co. USA.
- 4. Hamill, J. and Knutzen, K.M. (2003), Biomechanical Basis of Human Movement. Lippincott Williams and Wilkins, USA.
- 5. Hay (1993), The biomechanics of sports techniques, Prentice Hall Inc. New Jersey.
- 6. McGinnis, P. (2004), Biomechanics of Sports & Exercise. Human Kinetics, USA.
- 7. Oatis, C.A. (2008). Kinesiology, 2nd Ed. Lippincott, Williams & Wilkins, USA.

#### SEMESTER V - PAPER III

ourse Code: PE 303 (E020503P) Year: Third Semester: Fifth				
	Cours	e Title: Rehabilitati	on and Sports	
Course Outco	mes:			
<ul> <li>Students</li> </ul>	will be able to unde	rstand a basic concep	ot of managing sports injuries.	
To under	stand the therapeutic a	pproach of rehabilitation	on after sports injuries.	
<ul> <li>To learn a</li> </ul>	bout the use of therap	eutic modalities and th	erapeutic body movements.	
Unit		Topics		redit
		Part-A		0+2
т .	Practice for Banda	aging.		
	Practice for massa			
	Demonstration of	Therapeutic Exercise	s.	
	A visit to Physioth	nerapy lab/centre/clin	ic.	
•	Write a Brief Rep	ort on the visit of the	lab/centre/clinic.	
		Part-B		
II Thera	peutic Exercises:			
•	Muscles Strength			
•		s of Muscle Strengthe	ning.	
•	Manual-Muscle st			
Streto	thing and Mobilizing			
•	Factors causing L	imitation of joint Ran	ge.	

# Suggested Readings:

- 1. Donatelle, R.J. and Ketcham P. (2007), Access to Health, Benjamin Cummings, Boston, USA.
- 2. Fahey, T.D., M.P. Insel and W.T. Rath (2006), Fit & Well: Core Concepts and Labs in Physical Fitness, Mcgraw Hill, New York.

Practical demonstration of exercises for mobilizing the shoulder,

- 3. Koley, Shymlal (2007) Exercise Physiology A basic Approach, friends publication New Delhi
- 4. Pande, P. K. (1987) Outline of Sports Medicine (New Delhi: Jaypee Brothers).

General stretching methods, and

elbow, wrist, hip knee, ankle and foot.

5. Roy, Steven and Richard, Irvin (1983) Sports Medicine, Benjamin Cummings. Boston, USA.

# SEMESTER V - PAPER IV

Course Code	le : PE 304 (E020504P) Year: Third Semester: Fifth			Fifth
	Cours	se Title: Research P	roject	
Course O	utcomes:			
• This	course is designed to develop	the understanding	of the basic research pro	cess.
• Tou	nderstand the processes and r	equirement for cond	lucting an interview.	
• To u	nderstand and learn the meth-	od of writing researc	h report.	
Unit	12 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Topic		Credits
	Choose a topic from y     Questionnaire with 20     students.			
I	Choose any one sport Institute / College stu		an interview for your	0+3 (Qualifying)
	Student has to learn to	prepare research rep	oort.	
Suggested r	eadings: http://heecontent.ups	dc.gov.in/Home.aspx		

# SEMESTER VI - PAPER I

Course Cod	ourse Code: PE 305(E020601T) Year: Third Semester: S		xth	
		Course Title: Research M	Methods	
• Stu	understand the need, scop idents will be able to under	stand the Research metho	methods in physical education and istical procedures and its presentation and	Sports.
Unit		Topics		Credits
I			ysical Education and sports. nd sports.	4+0
П	Type of Research      Basic Research     Applied Research     Action Research			
111	And the And the Andrews Control of the Andrew	erm Research problem. Innulation of Research Pro	oblem.	
IV	Hypothesis:  • Meaning of Hypo • Meaning of Reserved.	thesis. arch and Null Hypothesis		

	18
-	STUDONED BALL BALLBIA TO UNA SETONA TOA MARANTA MATROAU IN MALATAN MATROAU MALATAN DOA SHOPE

V	Survey of Related Literature:  Literature sources & Library Reading.  Need to survey allied and critical literature.
VI	<ul> <li>Introduction to Statistics</li> <li>Meaning, Definition and Importance of Statistics in Physical Education.</li> <li>Types of Data, Tabular and Graphical representation of data.</li> </ul>
VII	<ul> <li>Questionnaire and Interview:</li> <li>Meaning of Questionnaire and Interview.</li> <li>Procedure of making Questionnaire and conducting Interview.</li> </ul>
VIII	Research Report:  • Meaning of Research Report.  • Qualities of a good research report

#### Recommended Readings:

- 1. Author's guide: Research Methods applied to Health Physical and Recreation, Washington, D.C. 1991.
- 2. Best John & Kahni, J.V. 1992), Research in Education, New Delhi. Prentice Hall of India (Pvt.) Ltd.
- 3. Best, J.W. (1963), Research in education. U.S.A.: Prentice Hall.
- Clarke, H. H., & Clarke, D. H. (1975), Research process in physical education, Englewood cliffs, New Jersey: Prentice Hall, Inc.
- 5. Garrett, H.E. (1981), Statistics in psychology and education. New York: Vakils Feffer and Simon Ltd.
- 6. Koul, L. (2002), Methodology of Educational Research, Vikas Publishing House, New Delhi.
- Oyster, C. K., Hanten, W. P., & Llorens, L. A. (1987). Introduction to Research: A guide for the health science professional. Landon; J.B. Lippincott Company.
- 8. Thomas, J.R., & Nelson J.K. (2005), Research method in physical activity. U.S.A: Champaign, IL: Human Kinetics Books.
- Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2011), Research method in physical activity. U.S.A: Champaign, IL: Human Kinetics Books.
- 10. Verma, J. P. (2000), A textbook on sports statistics. Gwalior: Venus Publication

#### SEMESTER VI - PAPER II

Course Co	de: PE 306 (E020602T)	Year: Third	Semester: Sixth	
	Course Titl	e: Physical Education For I	Divyang	
Course	outcomes:			
	nis course will help the students physical education.	to understand the needs of th	ne DIVYANG people in relation to	
• To	learn and tackle any situation	while dealing DIVYANG peo	ople.	
• Th	nis course also leads to understa	nd the inclusion of DIVYAN	G people in sports.	
• To	understand the total concept o	f adapted physical education.	·	
Unit		Topics	Credits	
	Introduction:			
	<ul> <li>Meaning and Definition</li> </ul>	of Divyang.	4+0	
I	<ul> <li>Need and Importance o</li> </ul>	f Physical Education for Divy	ang people.	
	Adapted Physical Educati	on Part A:		
H	<ul> <li>Definition and Concept</li> </ul>	of Adapted Physical Education	on.	
	<ul> <li>Principles of Adapted P</li> </ul>	bysical Education		

	Adapted Physical Education Part B:	T
III	Need and Goals of Adapted Physical Education	
	Objectives of Adapted Physical Education.	
	Adapted Physical Education Part C:	
IV	Benefits of Adapted Physical Education	
	Role of Yoga in Adapted Physical Education.	
V	Physical Activities for Divyang:	1
	Outdoor activities for the divyang people.	
	<ul> <li>Rhythmic, Aquatic and Dance Activities for divyang people.</li> </ul>	
	<ul> <li>Physical activities for the children with unique needs.</li> </ul>	
	Disability and Rehabilitation:	1
VI	<ul> <li>Types and Causes of Physical Disabilities.</li> </ul>	
	<ul> <li>Functional and Occupational rehabilitation.</li> </ul>	
	Psycho-social Rehabilitation.	
	Programs:	
VII	<ul> <li>Personality Development Program for Divyang people.</li> </ul>	
	Social Welfare Program for Divyang people.	
	Inclusion in sports for Divyang people:	1
VIII	Recreational sports/ games.	
	Competitive sports/ games.	

#### Recommended Readings:

- 1. C, Blauwet, (2007). Promoting the Health and Human Rights of Individuals with a Disability through the Paralympic Movement. (ICSSPE,) at 21. (Blauwet- Promoting the Health).
- 2. Barton, L. (1993), Disability, empowerment and physical education, in J. Evans (ed.), Equality, Education and Physical Education. London: The Falmer Press.
- 3. Guttmann, L. (1976), Textbook of Sport for the Disabled. Oxford: HM & M Publishers.
- 4. K, DePauw & S. Gavron, (2005), Disability and Sport. (2nd Ed) Illinois: Human Kinetics.
- 5. R, Metts. (2000), Disability Issues, Trends and Recommendations for the World Bank (Washington D.C.: World Bank,).
- 6. Oliver, M. (1990), The Politics of Disablement. Basingstoke: Macmillan.
- 7. Sport England (2000), Young People with a Disability and Sport. London: Sport England.

## SEMESTER VI - PAPER III

Course Co	de: PE 307 (E020603P)	Year: Third	Semester: Sixth
	Co	ourse Title: Research and	d Sports
Course outc	omes:		-
<ul> <li>To l</li> </ul>	earn the techniques and sk	ills for the measurement	of various types of variables.
	rn to conduct physical Fitr		
<ul> <li>To l</li> </ul>	earn and understand about	Paralympics games.	Specific Control of the Control of t
Unit		Topics	Credits
THE RESIDENCE OF THE PERSON OF		Part-A	and the second of the second o

I	Research Perspective to learn the measurement of variables and analysis of sport skill:	0+2
	<ul> <li>Learn to measure Anthropometric Variables.</li> <li>Learn to measure Physiological Variables.</li> <li>Learn to measure Psychological Variables.</li> <li>Learn to conduct a Physical Fitness Test.</li> <li>Learn to analyze a skill of selected game/sport</li> </ul>	
	Part-B	
11	Paralympics Committee of India (PCI)  • Historical development of Paralympics.  • Aims and Objectives of PCI.  • Types of Para-competitions.	

- ACSM's Guidelines for Exercise Testing and Prescription (2001), American College of Sports Medicine, New York, U.S.A.
- 22. Anspaugh, D.J., G. Ezell and K.N. Goodman (2006) Teaching Today Health, Mosby Publishers, Chicago (USA
- Donatelle, R.J. and Ketcham P. (2007), Access to Health, Benjamin Cummings, Boston. USA. 24. Flyod, P.A., S.E. Mimms and C. Yelding (2003) Personal Health: Perspectives and Lifestyles, Thomson, Wadsworth, Belmont, California, USA.
- Test and Measurement & Evaluation in Physical Education & Sports by B.R. Gangawar Published by Ashoka Publication.

#### SEMESTER VI - PAPER IV

Course Co	Code: PE 308(E020604P) Year: Third Semester: Sixth			
White Manual Arman	(	Course Title: Research	h Project	***************************************
• It			plems of school going students ution with thehelp of analyzed	
Unit		Topics		Credit
I	sports programs.  • Analyze the data an	its for their interest toy ad submit a detailed re	r secondary government wards physical education and port and a presentation. eting the project but will write	0+3 (Qualifying