

Raja Mahendra Pratap Singh State University, Aligarh

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..)

To be implemented from Session 2021-22



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

SEMESTER – WISE TITLES OF THE PAPERS IN U.G. PHYSICAL EDUCATION COURSE			
YEAR	COURSE CODE	COURSE TITLE	CREDITS
First Year	Semester – I		
	PE 101 (E020101T)	Elements of Physical Education	4+0
	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
Second Year	Semester – III		
	PE 201 (E020301T)	Anatomy & Exercise Physiology	4+0
	PE 202 (E020302P)	Health and Physiology	0+2
	Semester – IV		
	PE 203 (E020401T)	Sports Psychology and Recreational Activities	4+0
	PE 204 (E020402P)	Sports Psychology	0+2
Third Year	Semester – V		
	PE 301 (E020501T)	Athletic Injuries and Rehabilitation	4+0
	PE 302 (E020502T)	Kinesiology and Biomechanics in Sports	4+0
	PE 303 (E020503P)	Physiotherapy, Rehabilitation & Sports	0+2
	PE 304 (E020504P)	Education Tour of physical education institutes & sports infrastructure.	0+3 (Qualifying)
	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 (E020604P)	Project	0+3 (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

Course code: PE 101 (E020101T)		Year: First	Semester: First
Course Title: Elements of Physical Education			
Course Outcomes: • The physical education is very wide concept and this course teaches about introduction and sociological concept of physical education. • To understand the historical development of physical education in India and other countries. • This course introduces about the general concept of good health and wellness. • Will help the student to promote healthy way of living by developing fitness and health plan.			
Credits:4	Max. Marks:25+75		Min. Passing Marks:10+25
Unit	TOPICS		No. of Lectures
I	Ancient Wisdom in Physical Education, Sports and Yoga: • Patanjali Yoga Sutra. • Ancient and Traditional Games of India. • Meaning, definition and concept of physical education. • Aims and objectives of Physical education. • Role of Gurukul System in Physical and Moral development. Vyayamshala, Akhada's for promoting fitness and discipline		08
II	History of Physical Education: • History and development of Physical education in India. • History of physical education in ancient Greece and Rome.		07
III	Sociological Foundation of Sports: • Meaning, Definition and importance of Sports Sociology. • Culture and sports. • Socialization and sports.		06
IV	Olympic Movement: • Olympic Movement: Ancient Olympic Games, Modern Olympic Games, Aims and Objectives of Olympic Games. • Olympic Spirit, Olympic Torch, Olympic Flag, Olympic Motto. • Asian Games. • Commonwealth Games.		08
V	Health Education: • Meaning, Definition, Objectives, Principles and Importance of Health Education, Dimensions of Health. • Food and Nutrition - Essential nutrients & their functions, Balanced diet, Health and Drugs • International health agencies- WHO, UNICEF, Red Cross Society.		08
VI	Fitness, Wellness and Lifestyle: • Meaning, Definition, Components, and types of physical fitness. • Factor affecting physical fitness. • Importance of Wellness and Active Lifestyle. • Role of Physical Activities in maintaining healthy Lifestyle.		08

VII	Artificial Intelligence in Physical Education and Sports: • Meaning, Definition and Concept of Artificial Intelligence. • Importance of Artificial Intelligence in Physical Education. • Future Scope of AI in enhancing teaching, coaching and sports performance.	08
VIII	Posture: • Meaning & Definition of Posture. • Importance of Good Posture. • Causes of Bad Posture. • Common Postural Deformities.	08

Suggested readings:

1. Foundation of Physical Education by Dr. Swatendra Singh, Nipur Publication, New Delhi.
2. Sharirik Shiksha ki Adhunik Prawatiya by Dr. Rajesh Pratap Singh, by University publication, New Delhi
3. Uppal AK & Gautam GP (2008). Health & Physical Education. Friends Publication. New Delhi
4. 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.
8. 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)
13. Sharkey, B. J. (1990). Physiology of fitness, Human Kinetics Book.
14. 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. Physical Fitness and Wellness by Dr. Swatendra Singh, Nipur Publication, New Delhi.

SEMESTER I - PAPER II

Course Code: PE 102 (E020102P)		Year: First	Semester: First
Course Title: Fitness and Yoga			
Course Outcomes: • To understand the basic practical concepts of Physical Fitness and Yoga. • To gain the basic knowledge about Physical conditioning through various fitness work-out methods. • To learn and understand Yogasanas and Pranayama.			
Max.Marks: 25+75		Min. Passing Marks :10+25	
Unit	Topics		Credits
I	Part-A		0+2
	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		
II	Part-B		
	Introduction of Yoga: • Practical aspect of yoga. • Types, scope & importance of yoga.		
	Asanas: • Definition of Asana, differences between Asana and physical exercise. • Surya-namaskar, Bhujang asana, Naukasana, Halasana, Vajrasana, Padmasana, Shavasana, Makrasana, Dhanurasana, Tadasana. Pranayama: • Difference and classification of pranayama. • Difference between pranayama and breathing. • Anulom-Vilom.		
Suggested Readings: 1. ACSM’s Guidelines for Exercise Testing and Prescription (2001), American College of 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. 4. 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 manoranjana. 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: Sports Organization and Management			
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.			
Max.Marks: 25+75		Min. Passing Marks : 10+25	
Unit	Topics		Credits
I	Introduction: - Meaning, concept and definition of sports management. - Aims and objectives of sports management.		4+0
II	Event Management - Meaning and concept of event - Planning and management of sports event. - Steps in event management: Planning, Executing, Evaluating		
III	Budget Part – A - Meaning, Definition, Preparation of Budget. - Principles of making Budget - Qualities of a good Budget.		
IV	Budget Part – B - The Budget Cycle and Budget Preparation Format. - Preparing the Departmental Financial Plan and estimate. - Expenditure management.		
V	Organization - Meaning and definition of Organization. - Need and importance of Organization. - Structure and functions of S.A.I., University Sports Council and A.I.U.		
VI	Supervision - Meaning and Definition of Supervision - Principles and Methods of Supervision - Role of a coach/manager.		
VII	Facilities & Equipment - Procedure to purchase sports goods and equipments. - Care and maintenance of Equipments. - Stock entry, Consumable and Non- Consumable sports goods		

VIII	Job Opportunities • Job Opportunities in Physical Education and Sports. • Career avenues and professional preparation. • Clients and Sponsorship.	
Suggested readings: 1. 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,. 3. Horine, Larry, ” Administration of Physical Education and Sport programs. WM-C Brown Publishers 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. 7. Sivia, G.S (1991). Sports Management in Universities, New Delhi: A.I.U. Deen Dayal Upadhyaya Marg. 2005) 8. Khel Sangthan Avam prabandhan by Dr. Swatendra Singh, Dr Poonam Bhandari, Dr Renu Das, Thakur Publication, Pvt Ltd Lucknow. 9. Sharirik Shiksha: Vidhyalaya Prashashan, by Dr. Rajesh Pratap Singh, University Publication New Delhi. 10. Dr. Swatendra Singh et.al., Sports organisation and Management, Thakur Publication, New Delhi		

SEMESTER II - PAPER II

Course Code: PE 104 (E020202P)		Year: First	Semester: second
Course Title: Sports Event and Track & Field			
Course Outcomes:			
• This course is designed to train the students for personal preparation and organising competitions. • This course enables the students to understand and learn the rules, regulations and technical aspects of Athletics.			
Max.Marks: 25+75		Min. Passing Marks : 10+25	
Unit	Topics		Credit
	Part-A		0+2
I	• To make a plan for organizing an event. • To organize Intramural Competition. • To prepare a budget plan for interclass competition. • Make a Sample Time Table for college. • Prepare the list of Consumable and Non-Consumable items. • Prepare a Bio data/ curriculum vitae/ Covering Letter.		
	Part-B		
II	<u>Track & Field:</u> • History. • Measurements. • Marking. • Rules. • Officials. • World and National Records.		
Suggested Readings:			
1. Parkhouse, Bonnie L., “The management of Sports – it’s foundation and application,” Mosby publication, St.Louis (US), 1991 2. 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-CBrown 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: Anatomy and Exercise Physiology			
Course outcomes: - 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. - Students will understand the role of AI in monitoring physiological variables and improving health-related fitness.			
Max.Marks: 25+75		Min. Passing Marks : 10+25	
Unit	Topics		Credits
I	Introduction: - Meaning, Definition and Importance of Anatomy and Physiology in the field of Physical Education & Sports - Brief introduction of Cell, Tissues, Organs and various systems of human body.		4+0
II	Skeletal System: - Structural classification of bones. - Types of joints and major movements around them. - Functions of Skeletal System.		
III	Muscular System: - Classification, Structure and functions muscles. - Major group of muscles. - Effects of Exercise on Muscular and Skeletal System.		
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	
IX	Artificial Intelligence in Health and Exercise Physiology (8 Lectures) • Introduction to Artificial Intelligence (AI) • Meaning, concepts and applications of AI • AI, Machine Learning and Deep Learning • AI in Exercise Physiology • Monitoring heart rate and physiological responses • Wearable technologies and smart fitness devices • AI-based fitness assessment • AI in Health Monitoring • Smart watches and fitness trackers • Prediction of health risks through AI • Digital health records • Ethical Issues • Privacy and data security in sports and health	
Suggested Readings: 1. ACSM's Guidelines for Exercise Testing and Prescription (2001), American College of 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. 4. Flyod, P.A., S.E. Mimms and C. Yelding (2003), Personal Health: Perspectives and Lifestyles, Thomson, Wadsworth, Belmont, California, USA. 5. 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. 14. 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 16. Dr. Poonam Bhandari, Dr. Bhawna Timal, Anatomy and Exercise Physiology, Sports Vision Publication, New Delhi.		

SEMESTER III - PAPER II

Course Code: PE 202 (E020302P)		Year: Second	Semester: Third
Course Title: Health and Physiology			
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.			
Max.Marks: 25+75		Min. Passing Marks : 10+25	
Unit	Topics		Credits
	Part-A		
I	- Strength measurement / Back and leg Dinamometer - Lungs capacity measurement / Dry spyrometer. - Learning of measuring height, weight, waist circumference and hip circumference and Waist-Hip ratio by skinfold caliper & bio electrical impedance machine. - Learn to Measure Blood Pressure using Sphygmomanometer.		0+2
	Part-B		
II	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:			
- Jain, J. (2004), Khel Dawaon Ka (New Delhi: Delhi University Press). - Robbins, G., D. Powers and S. Burgess (2002), A Wellness Way of Life, McGraw Hill, New York, USA. - Koley, Shyamal (2007), Exercise Physiology — A Basic Approach (New Delhi: Friends Publications). - Jain AK (2002), Anatomy & Physiology for Nurses. Arya Publishers, Delhi. - Moried EN (2007), Essential of Human Anatomy & Physiology. Ed. 8th Dorling Kindersley, India. - Prives M and Others (2004), Human Anatomy Vol. I & IIParagon, Delhi. - Seeley & Others (2008), Anatomy & Physiology. McGraw Hill, Boston. - Health Education, Hygiene, First Aid & Sports Injuries by Dr. Neeraj Pratap Singh & Dr. Ajay Dubey, Sports Publication, New Delhi.			

SEMESTER IV - PAPER I

Course Code: PE 203 (E020401T)		Year: Second	Semester: Fourth
Course Title: Sports Psychology And RecreationalActivities			
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. - Students will understand how AI supports psychological preparation, athlete monitoring and performance enhancement.			
Max.Marks: 25+75		Min. Passing Marks : 10+25	
Unit	Topics		Credits
I	Introduction: - Meaning, Importance and scope of Sports Psychology - Growth and Development. - Psycho-physical Unity of Human behavior.		4+0
II	Learning: - Nature of learning, brief introduction to theories of learning. - Laws of learning, plateau in learning, transfer of Learning.		
III	Motivation: - Nature & Types of motivation, factors influencing motivation. - Motivational techniques and their impact on sports performance.		
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.	
VIII	Traditional Games: • Meaning and Types of Traditional Games. • Importance and Benefits of Traditional Games. • Mental and Physical development through Traditional Games.	
IX	Artificial Intelligence in Sports Psychology and Performance Analysis (8 Lectures) • Introduction to AI in Sports Sciences • AI-based Performance Analysis • Athlete Behaviour and Psychological Monitoring • AI Applications in Motivation and Mental Training • Virtual Reality (VR) and Augmented Reality (AR) in Sports Training • AI Chatbots and Digital Coaching Systems • AI for Injury Prediction and Prevention • Limitations and Ethical Concerns of AI in Sports	
Suggested Readings: 1. Alliance, A. (1999), Physical Best Activity Guide, New Delhi, 2. 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, Universal Book: Delhi. 5. Gangwar, B.R. (1999), Organisation Admn. & Methods of Physical education, Jalandhar: A.P. Pub. 6. Gupta R. Kumar P. & Sharma D.P. (1999), Lesson Plan in Physical Education & Sports. R.D.P. Publication. New Delhi. 7. 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. 11. 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
Course Title: Sports Psychology			
Course Outcomes: - To understand and learn the measurement and assessment techniques of important psychological traits. - To understand and learn the measurement and assessment of coordinative abilities of human body.			
Max.Marks: 25+75		Min. Passing Marks : 10+25	
Unit	Part-A		Credits
I	- Measurement of Personality and Personality Profile - Assessment of Sports Anxiety - Measurement of Motivation (Incentive Motivation and Achievement Motivation) - Measurement of Aggression in sports.		0+2
	Part-B		
II	- Reaction Time. - Hand eye co-ordination. - Foot-Eye Coordination. - Hand-Foot - Eye Coordination. - Team Building Games. Choose Any one Team Games as per given Annexure -A with following activity: - Layout and Measurement of Selected Game. - Techniques and Skills of selected game. - Rules and Regulations of selected game.		
Suggested Readings: - Cratty, Braynat. J., (1973) Movement Behavior and Motor Learning, Philadelphia: Lea and Febiger, Edn. - Magill, Richard A (1993) Motor Learning Concepts and Application, 4thed WCB Brown and Benchmark Publishers. - Passer, M.W., Smith, R.E., Holt, N. and Bremner, A. (2008). Psychology: The Science of Mind and Behaviour.McGraw-Hill Education.UK. - Oxendine, J.B. (1968) Psychology and Motor Learning, Englewood cliffs, New Jersey. - Cratty, B.J. (2000) Psychology of Contemporary sports, Human Kinetics Publishers, Champaign Illinois. - Carron, A.V., Hausenlas, H.A. Mark Eys (2005) Group Dynamics in Sport, organtown, WV: Fitness Information Technology, INC, US. - Cronbach J. Lec (1990) Essentials of Psychological Testing (Harper Colins Publishers).			

SEMESTER V - PAPER I

Course Code: PE 301 (E020501T)		Year: Third	Semester: Fifth
Course Title: Athletic Injuries and Physiotherapy			
Course outcomes: - Students will be able to understand about the common and special sports injuries and first aid related to them. - Students will be able to learn the significance of posture, posture related deformities and their remedial treatments. - Students will also learn different aspects of massage and Rehabilitation.			
Max.Marks: 25+75		Min. Passing Marks : 10+25	
Unit	Topics		Credit
I	Athletic Injuries and Athletic Care: - Concept and Significance of Athletic Care. - Factors causing Injuries. - General Principles of Preventing Injuries.		4+0
II	Common Sports Injuries: - Strain and Sprain, Lower Back Pain, Tennis Elbow, Shin Pain. - Blister, Contusion, Abrasion, Laceration, Hematoma, Fracture, Dislocation.		
III	Postural Deformities: - Causes and respective corrective exercises of: - Kyphosis. - Lordosis. - Knock Knees. - Flat Foot		
IV	Rehabilitation - RICE- Rest, Ice, Compression, Elevation. - DRABC- Danger, Response, Airways, Breathing, Circulation. Bandage - Types of Bandages. - Taping and Supports.		
V	Physiotherapy - Definition and Guiding principles of physiotherapy. - Importance of physiotherapy.		

VI	Hydrotherapy- • Meaning and Methods of Hydrotherapy. • Brief introduction of Cryotherapy, Thermotherapy, Contrast bath, Steam bath, Sauna bath, Hot Water Fomentation.	
VII	Massage • Meaning and Types of Massage. • Contradictions of Massage. • Importance of Massage in Rehabilitation and Sports.	
VIII	Therapeutic Exercises: • Meaning, Definition and Importance of Therapeutic Exercises. • Muscle Strengthening through Active and Passive Exercise.	

Recommended Readings:

1. 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.
3. Fahey, T.D., M.P. Insel and W.T. Rath (2006), Fit & Well: Core Concepts and Labs in Physical Fitness, mcgraw Hill, New York.
4. Flyod, P.A., S.E. Mimms and C. Yelding (2003) Personal Health: Perspectives and Lifestyles, Thomson, Wadsworth, Belmont, California, USA.
5. 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).
7. Kumari Sheela S. Rana, Amita, and Kaushik Seema, (2008), Fitness, Aerobics and Gym Operations, 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.
12. Dr. Swatendra Singh, Dr. Poonam Bhandari. Athletic Care and Rehabilitation, Khel Sahitya center, 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.			
Max.Marks: 25+75		Min. Passing Marks : 10+25	
Unit	Topics		Credits
I	Introduction: - Meaning, Definitions, Aims & Objective of Kinesiology. - Importance of Kinesiology for games and sports.		4+0
II	- Fundamental Movements of Human body. - Center of Gravity. - Line of Gravity.		
III	- Axis and Planes. - Types of Muscle Contraction.		
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	Kinematics: - Meaning of Kinematics. - Types- Linear and Angular. - Meaning of Speed, Velocity, Acceleration, Distance & Displacement.		

VIII	Kinetics: • Meaning of Kinetics • Types- Linear and Angular. • Meaning of Mass, Weight, Momentum and Pressure.	
Recommended Readings: 1. Bartlett, R. (2007), Introduction to Sports Biomechanics. Routledge Publishers, USA. 2. Blazeovich, 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. 8. Dr. Swatendra Singh, Dr. Poonam Bhandari. Kinesiology and Biomechanics in Physical Education, khel Sakhitya Center, New Delhi.		

SEMESTER V - PAPER III

Course Code: PE 303 (E020503P)		Year: Third	Semester: Fifth
Course Title: Rehabilitation and Sports			
Course Outcomes: - Students will be able to understand a basic concept of managing sports injuries. - To understand the therapeutic approach of rehabilitation after sports injuries. - To learn about the use of therapeutic modalities and therapeutic body movements.			
Max.Marks: 25+75		Min. Passing Marks : 10+25	
Unit	Topics		Credit
	Part-A		0+2
I	- Practice for Bandaging. - Practice for massage techniques. - Demonstration of Therapeutic modalities (infra red lamp, contrast bath,cold therapy, wax bath,ice pack). - A visit to Physiotherapy lab/centre/clinic. - Write a Brief Report on the visit of the lab/centre/clinic.		
	Part-B		
II	Therapeutic Exercises: - Muscles Strengthening Exercises. - General Principles of Muscle Strengthening. - Manual-Muscle strength testing. Stretching and Mobilizing Exercises: - Factors causing Limitation of joint Range. - General stretching methods, and - Practical demonstration of exercises for mobilizing the shoulder, elbow, wrist, hip knee, ankle and foot. Choose Any one individual Game as per given Annexure -A with following activity: - Layout and Measurement of Selected Game. - Techniques and Skills of selected game. - Rules and Rgulations of selected game.		
Suggested Readings: - 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 inPhysical Fitness, Mcgraw Hill, New York. - Koley, Shymlal (2007) Exercise Physiology – A basic Approach, friends publication NewDelhi - Pande, P. K. (1987) Outline of Sports Medicine (New Delhi: Jaypee Brothers). - Roy, Steven and Richard, Irvin (1983) Sports Medicine, Benjamin Cummings, Boston, USA.			

SEMESTER V - PAPER IV

Course Code : PE 304 (E020504P)	Year: Third	Semester: Fifth
Course Title: Education Tour		
Course Outcomes:		
• This course is designed to develop the understanding of the basic research process. • To understand the processes and requirement for conducting an interview. • To understand and learn the method of writing research report.		
Max.Marks: 25+75		Min. Passing Marks : 10+25
Unit	Topic	Credits
I	• Choose a tour of Physical education Institute / College From India and submit the Report Regarding Courses, Facilities like (Library, Laboratory, Health center) And infrastructure of that Institute. • Choose tour of any one sport / games International Stadium and conduct an interview and Submit latest facility Report. • Student has to learn to latest amenities Regarding Sports And fitness.	0+3 (Qualifying)
Suggested readings: http://heecontent.upsdc.gov.in/Home.aspx		

SEMESTER VI - PAPER I

Course Code: PE 305(E020601T)		Year: Third	Semester: Sixth
Course Title: Research Methods			
Course outcomes: - To understand the need, scope and types of Research methods in physical education. - Students will be able to understand the Research methods in Physical Education and Sports. - Students will be able to understand and learn basic statistical procedures and its presentation.			
Unit	Topics	Credits	
I	Introduction: - Definition, Meaning of Research. - Need and Importance of Research in Physical Education and sports. - Scope of Research in Physical Education and sports.	4+0	
II	Type of Research - Basic Research - Applied Research - Action Research		
III	Research Problem: - Meaning of the term Research problem. - Selection and Formulation of Research Problem.		
IV	Hypothesis: - Meaning of Hypothesis. - Meaning of Research and Null Hypothesis.		
V	Survey of Related Literature: - Literature sources & Library Reading. - Need to survey allied and critical literature.		
VI	Introduction to Statistics & Data Collection: - Meaning, Definition and Importance of Statistics in Physical Education. - Types of Data, Tabular and Graphical representation of data. - Meaning of Questionnaire and Interview. - Procedure for making Questionnaire and conducting Interview.		
VII	Introduction to AI in Research Methodology: - Meaning and Role of AI in Scientific Research. - Use of AI tools for research design, sampling techniques and automated data collection. - Use of AI Software for Plagiarism Detection.		
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.
4. 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.
7. 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.
9. 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 Code: PE 306 (E020602T)		Year: Third	Semester: Sixth
Course Title: Physical Education For Divyang			
Course outcomes:			
- This course will help the students to understand the needs of the DIVYANG people in relation to physical education. - To learn and tackle any situation while dealing DIVYANG people. - This course also leads to understand the inclusion of DIVYANG people in sports. - To understand the total concept of adapted physical education.			
Unit	Topics		Credits
I	Introduction: - Meaning and Definition of Divyang. - Need and Importance of Physical Education for Divyang people.		4+0
II	Adapted Physical Education Part A: - Definition and Concept of Adapted Physical Education. - Principles of Adapted Physical Education.		
III	Adapted Physical Education Part B: - Need and Goals of Adapted Physical Education - Objectives of Adapted Physical Education.		
IV	Adapted Physical Education Part C: - Benefits of Adapted Physical Education - Role of Yoga in Adapted Physical Education.		
V	Physical Activities for Divyang: - Outdoor activities for the divyang people. - Rhythmic, Aquatic and Dance Activities for divyang people. - Physical activities for the children with unique needs.		
VI	Disability and Rehabilitation: - Types and Causes of Physical Disabilities. - Functional and Occupational rehabilitation. - Psycho-social Rehabilitation.		
VII	Programs: - Personality Development Program for Divyang people. - Social Welfare Program for Divyang people.		
VIII	Inclusion in sports for Divyang people: - Recreational sports/ games. - Competitive sports/ games.		
Recommended Readings: - 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). - Barton, L. (1993), Disability, empowerment and physical education, in J. Evans (ed.), Equality, Education and Physical Education. London: The Falmer Press. - Guttmann, L. (1976), Textbook of Sport for the Disabled. Oxford: HM & M Publishers. - K, DePauw & S. Gavron, (2005), Disability and Sport. (2nd Ed) Illinois: Human Kinetics. - R, Metts. (2000), Disability Issues, Trends and Recommendations for the World Bank (Washington D.C.:World Bank.). - Oliver, M. (1990), The Politics of Disablement. Basingstoke: Macmillan. - Sport England (2000), Young People with a Disability and Sport. London: Sport England.			

SEMESTER VI - PAPER III

Course Code: PE 307 (E020603P)		Year: Third	Semester: Sixth
Course Title: Research and Sports			
Course outcomes:			
• To learn the techniques and skills for the measurement of various types of variables. • Learn to conduct physical Fitness test and analysis of a sports skill. • To learn and understand about Paralympics games.			
Unit	Topics		Credits
I	Part-A		0+2
	Research Perspective to learn the measurement of variables and analysis of sport skill: • Learn to measure Anthropometric Variables. • Learn to measure Physiological Variables. • Learn to measure Psychological Variables. • Learn to conduct a Physical Fitness Test. • Learn to analyze a skill of selected game/sport		
II	Part-B		
	Paralympics Committee of India (PCI) • Historical development of Paralympics. • Aims and Objectives of PCI. • Types of Para-competitions.		
Suggested Readings:			
21. 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)			
23. 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.			
24. Test and Measurement & Evaluation in Physical Education & Sports by B.R. Gangawar Published by Ashoka Publication.			

SEMESTER VI - PAPER IV

Course Code: PE 308(E020604P)	Year: Third	Semester: Sixth
Course Title: Research Project		
Course outcomes:		
It will help the learner to understand the basic problems of school going students related to sports and Physical Education and finding their solution with the help of analyzed data.		
Unit	Topics	Credit
I	To conduct a survey or interview of primary or secondary government recognized school students for their interest towards physical education and sports programs. - Analyze the data and submit a detailed report and a presentation. - The student will work in groups in completing the project but will write the final paper individually.	0+3 (Qualifying)
Suggested Readings: Suggestive digital platforms web links- http://heecontent.upsdc.gov.in/Home.aspx		