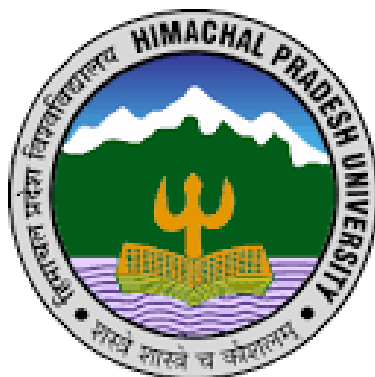


Himachal Pradesh University, Shimla



Syllabus

M.A. (Physical Education)

(Choice Based Credit System w.e.f. Academic Session 2022-2023)

Department of Physical Education
Faculty of Education

M.A. (Physical Education) SYLLABUS

Semester – I

Core Courses

Course Code: MAPE-CC-101

Marks: (ESE=70+CCA=30) = 100

Course Title: Research Process in Physical Education and Sports

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Describe the nature, purpose, scope, and types of research in Physical Education and Sports.
2. Frame hypothesis, research designs and identify data sources in sports research.
3. Develop tool and testing procedure for data collection.
4. Prepare the research proposals and develop skills for thesis writing.

Unit-I

Introduction, Research Problem, Review of Related Literature and Hypothesis

- Meaning and definition of research, need, nature and scope of research in physical education.
- Classification of research and qualities of a good researcher.
- Need, sources and importance of review of related literature.
- Meaning, locating and selection of research problem.
- Delimitation and limitations of research problem.
- Hypothesis: Meaning, formulation, classification, importance and testing of hypothesis.

Unit-II

Methods of Research

- Philosophical research: Meaning, purpose and its significance.
- Historical research: Meaning, purpose, steps in historical research, sources of historical research, historical criticism and its significance.
- Survey research: Meaning, purpose, its types and significance.
- Experimental Research: Meaning, purpose, steps involved in experimental research and its significance, types of variables, experimental validity and types of experimental design.
- Case study: Meaning, purpose and its significance.

Unit-III

Sampling and Tools of Data Collection

- Concept of population, sample, sampling frame and importance of sampling.
- Types of sampling techniques:
 - a) Probability methods: Systematic sampling, cluster sampling, stratified sampling, area sampling and multistage sampling.
 - b) Non-probability methods: Convenience sampling, judgment sampling and quota sampling.

- Tools of data collection:
 - a) Scale- meaning and types.
 - b) Test- meaning and types.
 - c) Inventory- meaning and types.
 - d) Questionnaire- meaning and types.
 - e) Observation- meaning and types.
 - f) Schedule and check-list.

Unit-IV
Research Proposal and Report

- Research Proposal: Meaning, its types and method of writing research proposal.
- Research Report: Meaning, types of research report and format of writing Thesis/Dissertation.
- Method of writing abstract and full paper for presentation in a conference and to publish in journals.
- Referencing: APA style, MLA style and Chicago style.
- Measurement of research impact and productivity: Citation, impact factor, H-Index and i10-Index.
- Oral and poster presentation.
- Ethical issues in research and plagiarism.

Suggested Readings:

- Ahlawat, R. P. (2016). Research Process in Physical Education and Sports Sciences. Friends Publication.
- Flick, U. (2017). Introducing Research Methodology. Sage Publications.
- Flick, U. (2019). An Introduction to Qualitative Research. Sage Publications.
- Kahn, J. V. (2016). Research in Education (Vol. 10). Pearson Education Inc.
- Kamlesh, D. M. (2019). Methodology of Research in Physical Education and Sports. Sports Publication.
- Kothari, C. (2019). Research Methodology: Methods and Techniques. New Age International Publishers.
- Mishra, P. D. (2018). Research and Statistics in Physical Education. Sports Publication.
- Thomas, J. R. (2016). Research Method in Physical Activity. US: Human Kinetics.

Course Code: MAPE-CC-102

Marks: (ESE=70+CCA=30) = 100

Course Title: Physiology of Exercise

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Understand the basic physiological principles of human body systems.
2. Examine the acute and chronic effects of exercise on physiological functions.
3. Apply the knowledge of energy systems during exercise.
4. Explain the effect of environment, age, gender and ergogenic aids on exercise and training.

5. Explore the knowledge about research in the field of exercise physiology.

Unit-I

Introduction to Exercise Physiology and Various Human Body Systems

- Meaning, scope and importance of exercise physiology in physical education and sports.
- An overview of the system of organisation of the human body.
- Muscular System: Differentiation of muscle types, macro and micro-structure of the skeletal muscle, chemical composition, sliding filament theory of muscle contraction. Types of muscle fiber, muscle tone, its properties and advantages of good muscle tone, electromyography (EMG), muscle fatigue, its sources and symptoms. Effect of exercises and training on the skeletal muscle.
- Cardiovascular system: Structure of human heart, mechanism of blood circulation through heart, neural regulation of the cardiovascular system, electrocardiography (ECG), blood and its composition, functions of blood and effect of exercises and training on the cardiovascular system.
- Respiratory system: Respiratory pathways, mechanism of breathing, neural regulation of respiratory system. Lung volumes and capacities and effect of exercises and training on the respiratory system.

Unit-II

Bioenergetics and Neuromuscular Junction

- Bioenergetics: Meaning and sources of energy.
- ATP-PC or phosphagen system.
- Anaerobic metabolism and aerobic metabolism.
- Carbohydrate, fat and protein metabolism.
- Aerobic and anaerobic systems during rest and exercise.
- Contributions of different energy systems to various sports and games.
- Neuron: Its structure, types and functions.
- Motor unit, bio-electric potential, proprioception and kinesthesia.
- Neuromuscular junction and transmission of nerve impulse across it.

Unit-III

Environment, Age, Gender and Sports Performance

- Balance between heat loss and heat production: Radiation, convection, conduction, respiration, perspiration and evaporation.
- Regulation of body temperature during hot, cold and humid environmental conditions.
- Physiological responses, acclimatisation and health risks of exercise under different environmental conditions (Hot, Cold and Humid).
- High altitude training: Immediate physiological changes in high-altitude, long-term adaptations and importance of high-altitude training.
- Physiological basis of talent identification.
- Physiological differences among men and women, difference in athletic abilities, female athlete's triad and hormonal responses to exercise.

Unit-IV

Ergogenic Aids in Exercise and Sports and their Physiological basis

- Ergogenic Aids: Meaning and their role in optimising sports performance.
- Types of ergogenic Aids: Erythropoietin, blood doping, carbohydrate loading and oxygen loading.
- Influence of stimulants on sports performance: Caffeine, cocaine and amphetamines.
- Influence of anabolic steroids, androstenedione, beta blocker, choline, creatine and human growth hormone on sports performance.
- Physiological aspects of the development of strength, endurance, speed, agility and coordination.

Suggested Readings:

- Brown, R. G. (2015). Fundamentals of Exercise Physiology. Friends Publication.
- Chatterjee, C. C. (2018). Human Physiology (12th Ed., Vol. 1). CBS Publishers.
- Fox Stuart Ira (2016). Human Physiology (15th Edition). McGraw-Hill Education.
- Porcari, J., Bryant, C., and Comana, F. (2015). Exercise Physiology. FA Davis.
- Varshney, V. P. and Mona Bedi (2018). Ghai's Textbook of Practical Physiology. JaypeeBrothers Medical Publishers.
- William D. McArdle (2014). Exercise Physiology: Nutrition, Energy and Human Performance (8th Edition). Lippincott Williams and Wilkins.

Course Code: MAPE-CC-103

Marks: (ESE=70+CCA=30) = 100

Course Title: Sports Management and Curriculum Designs in Physical Education

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Describe functions of management, principles of planning and other management skills.
2. Analyse the guidelines for the purchase and supply of equipment.
3. Understand the organisation and management of sports competitions.
4. Examine the procedures involved in the curriculum development process.
5. Discuss the relevance of different models for designing the curriculum.
6. Develop skills to evaluate different types of curriculum.

Unit-I

Introduction to Sports Management, Programme Planning, Financial Management and Public Relation

- Sports management: Definition, importance, functions and scope of sports Management.
- Personnel management: Meaning, principles and aspects of personal management.

- Roles of sports manager: Interpersonal roles, informational roles, decisional roles, managerial roles and qualities of a manager.
- Programme planning: Meaning, steps involved in programme planning, characteristics and principles of planning a physical education programme.
- Public relation in sports: Meaning, definitions, principles, planning and organising public relation programme in schools and communities.
- Financial management: Meaning, need for financial management, principles of financial management, preparation of budget, sources of funds and expenditure.

Unit-II

Class Management, Facilities and Equipment Management and Organisation of Sports Events

- Class management: Meaning, steps involved in class management and principles of class management.
- Facilities and equipment management: Meaning, types of facility, construction, and management of sports infrastructures (indoor and outdoor), procedure of purchase of sports material, stocktaking and storing equipment, care and maintenance and disposal of equipment.
- Types of tournament: Knockout or elimination, league or round robin, combination, consolation, challenge tournaments. Meaning, objectives, conduct and importance of the intramural and extramural tournaments.
- Process of organising sports events: Notifications, invitations, formulation of different committees, selection of officials, monitoring, report writing and maintaining records.

Unit-III

Curriculum Designing and Role of Statutory Bodies

- Concept and principles of curriculum, various phases of the curriculum development.
- Types of curriculum design: Subject centric, learner centric, experience centric, problem centric and core curriculum, local and specific curriculum.
- Models of curriculum evaluation: Tyler's model, Stake's model, Scriven's model, Kirkpatrick's model.
- Choice based credit system and its implementation.
- India's National Education Policy-2020: Introduction and several major reforms in education through NEP.
- Opportunities and responsibilities in sports and physical education after NEP.
- Role of national level statutory bodies - UGC, NCTE and university in curriculum development.

Unit-IV

Curriculum Practices, Safety Considerations and Evaluation

- Preparation and selection of content of the curriculum at the elementary level, middle level and secondary level.
- Organisation of the physical education programme in the urban and rural areas.
- Role of students, teachers and educational administrators in curriculum change and improvement.
- Planning for safety in outdoor and indoor settings: For players, coaches, officials and spectators.
- Sports law and legal liability: Meaning, concepts, application of contract in sport and legal liabilities in physical education and sports.

- Curriculum evaluation: Tools and techniques of curriculum evaluation- observation, oral, interview, opinionnaire, focused group discussion, rating scale etc.

Suggested Readings:

- Bonnie, L. (1991). The Management of Sports. St. Louis: Mosby Publishing Company, Park House.
- Bucher A. Charles, (1993) Management of Physical Education and Sports (10th ed.) St. Louis: Mobsy Publishing Company.
- Carl, E, Willgoose. (1982. Curriculum in Physical Education, London: Prentice Hall.
- Chakraborty, S. (1998). Sports Management. New Delhi: Sports Publication.
- Charles, A, Bucher & March, L, Krotee. (1993). Management of Physical Education and Sports. St. Louis: Mosby Publishing Company.
- Chelladurai, P. (1999). Human Resources Management in Sports and Recreation. Human Kinetics.
- Aggarwal, J.C (1990). Curriculum Reform in India – World overviews, Doaba World Education Series – 3 Delhi: Doaba House, Book seller and Publisher.
- Arora, G.L. (1984): Reflections on Curriculum, New Delhi: NCERT.
- Carl, E, Willgoose. (1982. Curriculum in Physical Education, London: Prentice Hall.
- John, E, Nixon and Ann, E, Jewett. (1964). Physical Education Curriculum, New York: The Ronald Press Company.
- McKernan, James (2007). Curriculum and Imagination: Process, Theory, Pedagogy and Action Research, U.K. Routledge
- NCERT (2005). National Curriculum Framework-2005, New Delhi: NCERT.
- Williams, J.F. (2003). Principles of Physical Education. Meerut: College Book House.
- Rao, V. K. (2015). Principles of the curriculum. New Delhi: APH publishing Corporation.
- Tala, M. (2012). Curriculum development: Perspectives, principles and issues. Pearson
- Veer, U. (2014). Modern teaching and curriculum management. New Delhi: Anmol publication.

Course Code: MAPE-CC-104

Marks: (ESE=70+CCA=30) = 100

Course Title: Educational Technology and Pedagogical Techniques in Physical Education

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Comprehend various aspects of education technology.
2. Implement different information technological tools used in the field of physical education and sports.
3. Understand the concept of team teaching and effecting teaching.
4. Prepare the different types of lesson plans used in physical education.
5. Differentiate between the micro-teaching and macro-teaching.

Unit-I

Education and Educational Technology

- Education: Meaning, definition, concept and types of education.
- Educational technology: Meaning, definition, need, nature and scope.

- Technological devices used in physical education and sports: White/Green board, interactive board, pen drive, video camera, smart watch, collar mike, smartphone, iPad, tablet, laptop, LED, projector and digital textbook.
- Audio and video technology: Meaning, definition, importance, advantages and scope of audio and video technology in the field of physical education and sports.
- Technological advancement in the field of Physical Education & Sports.

Unit-II

Teaching and Effective Teaching

- Teaching: Meaning, definition, phases of teaching (pre-active, inter-active and post-active).
- Levels of teaching (memory level, understanding level and reflective level).
- Effective teaching: Meaning, definition, importance and principles of effective teaching.
- Efficient teacher's responsibilities towards students, institution, society, state and nation.
- Professional responsibilities of physical education teacher.

Unit-III

Lesson Planning

- Lesson plan: Meaning, definition, importance and principles of lesson plan.
- Types of lesson plan: Theory lesson plan, movement lesson plan (action songs and motion stories), general lesson plan and skill lesson plan (games & athletics).
- Various parts of a lesson plan.
- Difference between teaching and coaching lesson plan.
- Feedback: Students feedback on lesson content and lesson effectiveness.
- Teacher's self-evaluation: Importance and techniques of self-evaluation.
- Presentation techniques: Meaning, importance and techniques of presentation.

Unit-IV

Methods and Pedagogic Techniques

- Methods of teaching: Meaning, importance, types and factors affecting teaching methods.
- Micro teaching: Meaning, definition, importance, characteristics, steps of micro-teaching and advantages of micro-teaching, difference between micro teaching and macro-teaching.
- Team teaching: Meaning, definition, principles and advantages of team teaching.
- Simulation teaching: Meaning, definition, types, steps and limitations of simulation teaching.
- Class management: Meaning, definition, important factors influencing class management.
- Student learning: Concept and stages of student learning assessment.

Suggested Readings:

- Brar, R. S. et al. (2008). Teaching Methodology and Educational Technology in Physical Education, Kalyani Publisher: New Delhi.
- Hoover, Kenneth H (1972). The Professional Teacher's Handbook, Boston, Allyn and Bacon.

- Krik, David (1988). Physical Education and Curriculum Study, Kent, Croom Helm.
- Mohanty, J. (1992). Educational Technology, New Delhi.
- Wessel Janet A, and Kelly Luke (1986). Achievement-Based Curriculum Development in Physical Education, Philadelphia, Lea and Febiger.
- Vaidhya, Rajesh and Ramakrishnan, K. S. (2007). Lesson Planning in Education and Physical Education. Sports Publication, G-6, 23/23B EMCA House, Ansari Road, Darya Ganj New Delhi.
- Anil and Daljinder (2005). Methods in Physical Education, Friends Publication, Delhi.

Discipline Elective Courses

Course Code: MAPE-EC-101

Marks: (ESE=70+CCA=30) = 100

Course Title: Value and Environment Education

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Explain the role of values, its concepts and functions across the globe and in Indian society.
2. Understand the importance of the environment and environmental conservation.
3. Develop the skills for protecting the environment.
4. Promote the knowledge of value and environmental education.
5. Analyse the rural-urban health and sanitation related problems and suggest their solutions.

Unit-I

Introduction to Value Education

- Values: Meaning, definition and concepts of values.
- Value education: Meaning, definition, objectives, need, importance and its scope.
- Source of values: Family, friends, peers, colleagues, society, school, culture, economy, religion, media, work place and law and order.
- Classification of values: Universal, human, personal, family, socio-cultural, moral, ethical, aesthetic, spiritual, material, economic and pragmatic.
- Moral values: Meaning, definition, need, importance and theories of values.

Unit-II

Ethics and Value Systems

- Ethics: Meaning, definition, need, importance and types of ethics.
- Professional ethics for a coach, a physical education teacher and a player.
- WADA ethical panel: Guiding values in sport and anti-doping.
- Value system: Meaning, definition and factors influencing value system.
- Characteristics of value system: Personal and communal values, exceptional, consistency (internally and externally) and idealized vs realized.
- Introduction of the POCSO (Protection of Children from Sexual Offences) Act, 2019.

Unit-III

Environmental Education

- Meaning, definition, scope and importance of environmental studies.
- Concept and historical background of environmental education.

- Celebration of various days in relation to environment.
- Concept of plastic ban, recycling of plastic, impact of plastic ban on environment conservation, provision of alternative biodegradable packing material.
- Role of educational institutes in environmental conservation, sustainable development and pollution free eco-system.
- Greenhouse effect: Global warming, deforestation, ocean acidification, ozone layer depletion, acid rain and their impact on human community and agriculture.
- Tree plantation: A real time alternative to biodiversity conservation.

Unit-IV

Rural and Urban Health and Environmental Pollution

- Rural health problems, causes of rural health problems, points to be kept in mind for improvement of rural sanitation and measures to improve health problems.
- Urban health problems, health inequality in urban areas, urban health and climate change, health services of urban area, suggested educational activity, services on urban slum area, sanitation at fairs and festivals and mass education.
- Meaning, causes, effects and prevention of air pollution, water pollution, soil pollution, noise pollution, radioactive pollution and thermal pollution and role of the pollution control board.

Suggested Readings:

- Athman, J., and Monroe, M. (2004). The Effects of Environment-Based Education on Students Achievement Motivation. Journal of Interpretation Research. 9(1), 9-25.
- Jadhav, H., and Bhosale, V. M. (1995). Environmental Protection and Laws. Himalaya Publishing House.
- Jitendra Kumar Thakur (2019). Value and Environmental Education. Sports Publication.
- Mohit Chakrabarti (2008). Value Education: Changing Perspective. Kanishka Publication.
- Singh, B. (2018). Value and Environmental Education. Friends Publications.
- Vandana Meshram-Ingle (2017). Value and Environmental Education. Educational Publishers and Distributors.

Course Code: MAPE-EC-102

Marks: (ESE=70+CCA=30) = 100

Course Title: Sports Technology

L	T	P	Cr
3	0	0	3

Course Outcomes

On completion of the course, the students shall be able to:

1. Comprehend about the sports technologies and their aspects in Physical Education.
2. Summarise the mechanics of engineering materials and concepts.
3. Acknowledge the importance of sports infrastructure and its maintenance.
4. Develop basic understanding of theoretical analysis of cost and price.

Unit-I

Sports Technology

- Meaning, definition, purpose, advantages and applications of sports technology.
- General principles and purpose of instrumentation in sports.

- Workflow of instrumentation and business aspects.
- Technological impacts on sports.

Unit-II

Science of Sports Materials

- Adhesives: Nano glue, nano-molding technology and nano turf.
- Footwear: Types of footwear (sport-specific), production of footwear, factors to be considered while production and application in sports, constraints in footwear production.
- Foams: Polyurethane, polystyrene, styrofoam, closed-cell and open-cell foams, neoprene foam.
- Smart Materials: Shape memory alloy (SMA), thermochromic film, high-density modelling foam.

Unit-III

Surfaces of Playfields

- Modern surfaces for playfields, construction and installation of sports surfaces.
- Types of materials: Synthetic, wood, polyurethane.
- Artificial turf and modern technology in the construction of indoor and outdoor facilities.
- Technology in manufacturing modern play equipments.
- Use of computer and software in match analysis and coaching.

Unit-IV

Modern Equipment

- Playing equipment: Balls, its types, materials and advantages.
- Bat/Stick/ Racquets: Types, materials and advantages.
- Clothing and shoes: Types, materials and advantages.
- Measuring equipment: Running, throwing and jumping events.
- Protective equipment: Types, materials and advantages, sports equipment with nano technology and ITS advantage.

Suggested Readings:

- Charles J.A. Crane, F.A.A. and Furness, J.A.G. (1987). Selection of Engineering Materials. UK: Butterworth Heiremann.
- Finn, R.A. and Trojan, P.K. (1999). Engineering Materials and their Applications. UK: Jaico Publisher.
- John Mongilo. (2001). Nano Technology 101. New York: Green wood publishing group.
- Walia, J.S. (1999). Principles and Methods of Education. (Paul Publishers, Jalandhar.
- Kochar, S.K. (1982). Methods and Techniques of Teaching. (New Delhi, Jalandhar, Sterling Publishers Pvt. Ltd.).

Course Code: MAPE-EC-103

Marks: (ESE=70+CCA=30) = 100

Course Title: Yogic Science

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Understand the basic concepts of yoga.
2. Demonstrate various types of asanas, pranayama and kriyas.
3. Comprehend the different philosophies of Yoga.
4. Integrate sports with yoga for performance enhancement.
5. Anticipate the management of common health problems via yoga practices.

Unit-I

Introduction to Yoga

- Meaning, definitions and historical background of yoga.
- Aims, objectives, importance and scope of yoga in modern era.
- Applications and misconceptions about yoga in the modern society.
- Introduction to Patanjali yoga sutra.
- Concept of Ashtanga Yoga.

Unit-II

Schools of Yoga and Philosophical Concepts

- Introduction to different branches of Yoga: Raja yoga, bhakti yoga, karma yoga, mantra yoga, gyana yoga and hatha yoga.
- Concept of pancha mahabhuta, panch kosha and panch prana.
- Concept of chakras and aura in yoga.
- Philosophy of the sacred syllable “Om” (AUM).
- Concept of triguna and tridosha in yoga.

Unit-III

Shatkarma, Asanas, Pranayam, Mudras and Bandhas

- Shatkarma: Meaning, definition, types, techniques, precautions and benefits.
- Asanas: Meaning, definition, types, techniques, precautions and benefits.
- Pranayama: Meaning, definition, types, techniques, precautions and benefits.
- Mudras: Meaning, definition, types, techniques, precautions and benefits.
- Bandhas: Meaning, definition, types, techniques, precautions and benefits.
- Suryanamaskar: Meaning, definition, suryanamaskar mantra and its meaning, technique, precautions and benefits.

Unit-IV

Mediation and Yoga for Common Health Problems

- Meditation: Meaning, definition, types, concept, ideal meditation environment, techniques and benefits of meditation.

- Role of yoga in psychological preparation of athletes.
- Yogic practices for the common health problems: Constipation, diabetes, obesity, cervical, arthritis, backache, sciatica pain, indigestion, snoring, eye disorders and migraine.
- Effect of yoga on the different physiological systems: Glandular, circulatory, skeletal, digestive, nervous, respiratory, excretory and reproductive system.

Suggested Readings:

- Anatharaman, T.N., (1996). Ancient Yoga and Modern Science. Project of History of Indian Sciences Philosophy and Culture.
- Arya, K. (2011). Yogic Science. Friends Publication.
- Arya, K. (2013). Yogic Education. Friends Publication.
- Debnath, K. K. (2010). Yogic Sciences. Friends Publication.
- Horovitz, E. G., and Elgelid, S. (2015). Yoga Therapy: Theory and Practice. Routledge.
- Kotecha., and Vaidya Rajesh. (2016). A Beginner’s Guide to Ayurveda. Chakrapani Publications.
- Kumar., and Dr. Kamakhya, (2008). Super Science of Yoga. Standard Publications.
- Leslie Kamin off and Amy Matthews (2011). Yoga Anatomy. Human Kinetics.
- Nathial, M. S. (2013). Yogic Education. Friends Publication.
- Niranjanananda Saraswati, Swami (2012). Gherenda Samhita.
- Pramod Kumar Sethi (2017). Yoga and Skin Diseases. Sports Publication.
- Saini, N. (2011). Yogic and Stress Management. Friends Publication.
- Swami Vivekananda, (2019). The Complete Book of Yoga : Karma Yoga, Bhakti Yoga, Raja Yoga, Jnana Yoga. Fingerprint Publishing.

Practical Courses (Skill Enhancement Courses)

Course Code: MAPE-LPC-101

Marks: (ESP=35+CCA=15) = 50

Course Title: Physiology of Exercise (Practical)

L	T	P	Cr
0	0	1	1

Course Outcomes:

On completion of the course, the students shall be able to:

1. Understand the different methods for calculating heart rate.
2. Appraise the learner with the handling of various exercise physiology equipment.
3. Develop proficiency in performing laboratory techniques and subsequent analysis of data commonly used in a human performance Laboratory.
4. Summarize the procedure of measurements of lung capacities/volumes and calculation of energy cost.

Unit-I

- Measurement of heart rate from manual method: Radial, carotid, brachial, temporal, popliteal and pedal.
- Estimation of target heart rate.

- Blood Pressure measurement.
- Measurement of lung volumes: Tidal volume (TV), inspiratory reserve volume (IRV), expiratory reserve volume (ERV) and residual volume (RV).
- Measurement of lung Capacities: Inspiratory (IC), vital capacity (VC), functional residual capacity (FRC) and total lung capacity (TLC).
- Calculation of Energy cost
- Blood lactate Analysis.

Course Code: MAPE-PC-101

Marks: (ESP=70+CCA=30) = 100

Course Title: Track Events (Sprints, Middle Distance, Long Distance, Relays, Hurdle Races and Race Walk)

L	T	P	Cr
0	0	4	2

Course outcomes:

On completion of the course, the students shall be able to:

1. Mark the standard 400mts/200mts track.
2. Explain the rules and regulations of the track events.
3. Learn fundamental skills and techniques of track events.
4. Demonstrate proper form and technique while performing each event.
5. Perform officiating and conduct the track events.
6. Identify the mechanical principles involved in skills and technique of track events.

Unit-I

- Introduction to athletics and historical development of events at national and international levels.
- Controlling bodies of athletics at national and international level.
- Major National and International competitions in athletics.
- Rules and regulations of track events and their latest amendments.
- Warming-up and cooling down exercises for various track events.
- Mechanical analysis of track events.
- Starting techniques: Crouch start and its variations, standing start and flying start.
- Fundamental skills and techniques of sprint, middle distance and long-distance races.
- Finishing techniques: run through, shoulder shrug and lunges (dip).
- Fundamental skills and techniques of relay races (4x100m, 4x400m).
- Fundamental skills and techniques of hurdle races.
- Fundamental skills and techniques of race walk.
- Drills and conditioning exercises for track events.
- Construction and marking of standard (400m/200m) track.
- Technical rules and duties of track officials.
- Officiating in track events.
- World records in track events.

- Training methods and means for the development of motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Schneider, R. C. (2009). Ethics of Sport and Athletics: Theory, Issues, and Application. Wolters Kluwer Health/Lippincott Williams and Wilkins.
- Zeigler, E. F., and Spaeth, M. J. (1975). Administrative Theory and Practice in Physical Education and Athletics.
- <https://www.worldathletics.org/about-iaaf/documents/book-of-rules>.
- <https://sportsauthorityofindia.nic.in/showimg.asp?ID=580>

Course Code: MAPE-PC-102

Marks: (ESP=70+CCA=30) = 100

Course Title: Team Sports: (Basketball, Cricket, Football, Handball, Volleyball, Hockey and Kabaddi)

L	T	P	Cr
0	0	6	3

Course outcomes:

On completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Mark the field/court of respective games.
3. Learn fundamental skills and techniques related to games.
4. Develop skill proficiency.
5. Develop proficiency in Officiating and Conduct of the game.
6. Identify the mechanical principles involved in skills and technique of related games.

Unit-I

- Historical development of the games/sports at national and international levels.
- Controlling bodies of games/sports at national and international level.
- Major national and international competitions in games/sports.
- Rules and regulations of games/sports and their latest amendments.
- Layout and marking of playfields/grounds/courts and measurements/specifications of equipment used in games/sports.
- Warming-up and cooling down exercises for games/sports.
- Fundamental skills of games/sports.
- Drills and lead-up Games.
- Training methods and means for the development of motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Allen Wade. (1967). Guide to Training and Coaching.
- Arpad, C. (1972). Soccer: Technique, Tactics, Coaching. Corvina Press.

- Bill Beswick. (2010). Focused for Soccer. 2nd Edition Human Kinetics.
- Bobby Moffat. (1985). The Basic Soccer Guide. Collier Books.
- Thomas Reilly and Mark Williams. (2003). Science and Soccer. Routledge London.
- Reita Clanton and Mary P. D. (1996). Team Handball: Steps to Success: Steps to Success Sports. Human Kinetics Publishers.
- Nikola Radic; AndrazRepar; Primoz Pori; Dussan Krizzman and MitjaIlc. (2013). Handball: from beginner to top player. Self-publishing N. Radic Publisher.
- Baha M. H and James D. L. (1994). Team Handball: Skills, Strategies and Training. Eddie Bowers Publishing Company.
- Bernath E. Phillips (2013). Fundamental Handball. Literary Licensing publisher.
- Siddharth (2016). Kabaddi Introduction, Rules, Information, History and Competitions. Sportycious. Retrieved 28 January 2020.
- Muniraju, S. (2015). A Text Book on Kabaddi: Kabaddi, Skills Techniques and Strategies. Lap Lambert Academic Publishing.
- E. Prasad Rao (2002). Kabaddi the complete hand book. Jagadamba Publications, Vizianagaram.

Course Code: MAPE-PC-103

Marks: (ESP=35+CCA=15) = 50

Course Title: Calisthenics, Aerobics and Yoga

L	T	P	Cr
0	0	2	1

Course outcomes:

On completion of the course, the students shall be able to:

1. Explain aim, objectives and principles of calisthenic, aerobics and yoga.
2. Describe and determine the benefits of calisthenic exercise, which improves flexibility, muscle strength, muscular endurance and muscle power.
3. Practice exercise workouts with correct alignment, cardiovascular strength and increased flexibility.
4. Manage a balanced personality and develop resilience through meditation.

**Unit-I
Calisthenics**

- Exercise with verbal/whistle/drum beats/musical beats: Two counts, four counts, eight counts and sixteen counts.
- Standing exercises, sitting exercises, jumping exercises and moving exercises.
- Combination of standing, jumping and moving exercises.

March Past

- Standard Hindi/English commands: attention, stand at ease, stand easy, right turn, left turn, about turn, right incline, left incline, dismiss, open order march, close order march, right or left dress up, by the left or center or right quick march.

Light Apparatus Activities

- Dumbbells, hoops, umbrella, ribbons, wands and lezuim.

Aerobics

- Warm-up aerobics moves: Step-hop and kick, rotating lunge, stork fly, back twist, touch-down and hip circles.
- Cool-down aerobics moves: cross-legged fold, tip-over tuck, kneeling quad stretch, seated leg cradle, butterfly, modified hurdler stretch.
- Rhythmic aerobics: Music and beat counts, over the top.
- Low impact aerobics: Marching basics (leg curl, toe touch, heel touch, in and out, side touch); Steps- single step touch, 'V' shape, 'A' shape, 'I' shape, 'Z', shape, 'square' shape, double side to side step touch, grapevine, dance (mambo-chacha, twisting).
- High impact aerobics: step foot placement and basics (toe touch and heel touch on step), 'V' shape, 'A' shape, 'I' shape, double side to side step touch, grapevine, turning on step, dance (mambo-chacha, twisting).
- Development and implementation of aerobic training protocols to optimise health and sports performance.

Yoga

- Asanas: Types, techniques, sequencing, precautions and benefits.
- Pranayama: Types, techniques precautions and benefits.
- Suryanamaskar: Technique, precautions and benefits.
- Meditation: Meaning, techniques, precautions and benefits of meditation.
- Shatkarma: Types, techniques, precautions and benefits.

Suggested Readings:

- Chakraborty Samiran (2006). Activities for children, Sports Publication.
- Jain Deepak (2008). Physical activities for elementary school children, Khel Sahitya Kendra.
- Kenneth H. Cooper. (1970). The new aerobics. Bantam Books.
- Anatharaman, T.N., (1996). Ancient Yoga and Modern Science. Project of History of IndianSciences Philosophy and Culture.
- Bhardwaj and Yogeshwar. (2004). Textbook of Yoga. Publisher: Penguin, India.
- Jha and Gangadhar. (1894). Yoga Sara Samgraha. Bombay Theosophical Fund, Tatva Vivechaka Press, Bombay.
- Kumar and Kamakhya. (2008). Super Science of Yoga. Standard Publications.
- Sturgess and Stephen. (1996). The Yoga Book. Watkins Publications, London, University ofMichigan, Lonavala.

Course Code: MAPE-PC-104
Course Title: Teaching Practice-I

Marks: ESP= 50

L	T	P	Cr
0	0	6	3

Teaching Experience:

• The M.A. (Physical Education) 1st semester students need to develop proficiency in taking teaching lessons in selected games/sports discipline. In view of this, simulated teaching practice of 02 weeks will be conducted/organised in the university campus. In this simulated teaching practice, it would be compulsory for every student to undertake 10 supervised teaching lessons. Out of 10 lessons, three lessons (03) from track events, three lessons (03) from team games/sports, two lessons (02) of classroom teaching and two lessons (02) of general activity shall be taken by each student in playground/class itself. The Chairperson/or his/her nominee will certify that the candidate's notebook is complete in all aspects and the candidate has fulfilled all essential requirements pertaining to teaching practice.

Ability Enhancement Course

Course Code: MAPE-AEC-101
Course Title: Intramural Activities-I

Marks: ESP=50

L	T	P	Cr
0	0	2	1

Course outcomes:

On completion of the course, the students shall be able to:

1. Acquire relevant skills in various Sports and Games.
2. Develop good judgment and fair play in competitions.
3. Enhance teamwork and leadership skills.
4. Develop social interaction/team cohesion among diverse demographic representations through play.
5. Imbibe organising proficiency in various sporting events.

Unit-I

- Introduction to intramural.
- Orientation and house distribution.
- Appointment of house bearers and house masters.
- Framing of rules and regulations of inauguration of intramural competitions.
- March past and placard display.
- Orientation of rules and regulations.
- Competition planning, organising, officiating, participating and overall management of cross country, basketball, cricket, football, handball, volleyball, hockey and kabaddi.

Semester-II

Core Courses

Course Code: MAPE-CC-201

Marks: (ESE=70+CCA=30) = 100

Course Title: Applied Statistics in Physical Education and Sports

L	T	P	Cr
3	0	0	3

Course Outcomes:

On the completion of the course, the students shall be able to:

1. Understand the fundamentals of statistics.
2. Summarize the graphical representation of data.
3. Differentiate between the application of parametric and non-parametric tests.
4. Develop an understanding about normal curve and divergence from normality.
5. Apply the different statistical techniques to different research problems.

Unit-I

Introduction to Statistics

- Meaning, definition and importance of statistics in physical education and sports.
- Types of statistics: Descriptive, inferential, comparative, relationship and predictive.
- Meaning of the statistical terms: Population, sample, parameter, statistic, variables (discrete and continuous) attribute, degree of freedom, level of significance and level of confidence.
- Characteristics of data: Raw scores, single scores, grouped and ungrouped data and types of scaled data – nominal, ordinal, interval and ratio.
- Frequency distribution, discrete and continuous class intervals.
- Parametric and Non-parametric statistics.

Unit-II

Measures of Central Tendency and Variability and Scales

- Measures of central tendency: Meaning, types (mean, median and mode), purposes, calculation and their advantages.
- Measures of variability: Meaning, types (range, quartile deviation, mean deviation and standard deviation) purposes, calculation and their advantages.
- Scale: Meaning, types (Sigma scale, Z scale and Hull scale), purposes, calculation and advantages of scoring scales.

Unit-III

Normal Curve, Graphical Representation and Non-Parametric Statistics

- Normal curve: Meaning, properties and principles.
- Divergence from normality: Skewness and kurtosis.
- Graphical representation in statistics: Line diagram, bar diagram, histogram, pie diagram, frequency polygon and ogive curve.

- Percentiles and percentile rank.
- Non-Parametric statistics: Computation of chi-square, rank order correlation and Mann Whitney-U test.

Unit-IV **Parametric Statistics (Relationship and Comparative Statistics)**

- Correlation: Meaning, definition, co-efficient of correlation, calculation of co-efficient of correlation by the product moment method.
- Large Sample test (z-test) for means of one sample and two samples.
- Small sample test (t-test) for means of one sample and two samples: Dependent and independent samples.
- One Way Analysis of Variance (ANOVA), Post- hoc Tests: LSD and Scheffe.
- Concept of ANCOVA.

Suggested Readings:

- Bhunia, A. (2013). Statistical methods for practice and research (A guide to data analysis using SPSS). South Asian Journal of Management, 20(1), 154.
- Cooke, D., and Clarke, G. M. (1989). A Basic Course in Statistics. Arnold.
- De Muth, J. E. (2014). Basic Statistics and Pharmaceutical Statistical Applications. CRC Press.
- Dhinu, M. R. (2017). Applied Statistics in Physical Education and Sports. Friends Publications.
- Gaur A. S., and Sanjaya S. (2009). Statistical Methods for Practice and Research: A Guide to Data Analysis Using SPSS. SAGE Publications Pvt.t Ltd.
- Gupta, B. C., and Walker, H. F. (2005). Applied Statistics for the Six Sigma Green Belt. ASQ Press.
- Kaur, S. (2017). Research and Statistics in Physical Education. Friends Publications.

Course Code: MAPE-CC-202

Marks: (ESE=70+CCA=30) = 100

Course Title: Measurement and Evaluation in Physical Education

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Analyse basic concepts of test, measurement and evaluation.
2. Understand the various steps of test construction and administration.
3. Evaluate and correlate sports performance with anthropometric measurements and physiological outcomes.
4. Demonstrate and conduct the various test of physical fitness, motor fitness and sports skills.

Unit-I

Introduction and Test Classification

- Meaning and definition of test, measurement and evaluation.
- Need, scope and importance of measurement and evaluation in physical education and sports.
- Principles of Measurement and Evaluation.
- Meaning and Classification of tests: Statistical test, physical tests, psychomotor tests and written tests.

Unit-II

Test Construction and Administration and Anthropometric Tests

- Steps of test construction: Knowledge tests, sports skill tests and specific fitness tests.
- Criteria of test selection: Objectivity, reliability, validity and precision, norms and standards.
- Test Administration: Administrative protocols (administrative guidelines) and Preparation of reports (construction of tables, groups and reporting).
- Anthropometric Measurements: Meaning, definition and method of measuring height, weight, circumferences, diameters and skinfolds.
- Body Composition: Meaning, definition and methods of its assessment- Skin fold caliper, BMI and Waist-hip ratio, Ponderal index, IOWA posture test, Bioelectrical impedance, DEXA and Hydrostatic weighing.

Unit-III

Physical Fitness, Motor Fitness and Aerobic-Anaerobic Tests

- Physical Fitness: Concept and assessment of physical fitness- AAHPERD Health Related Fitness Battery (revised in 1984), ACSM Health Related Physical Fitness Test, Roger's Physical Fitness Index.
- Motor Fitness: Meaning and definition, Indiana Motor Fitness Test, Oregon Motor Fitness Test and JCR Test.
- Motor Ability: Barrow motor ability test, Scott motor ability test and McCloy's general motor ability test.
- Aerobic Test: The Bruce Treadmill Test Protocol, 1.5 Mile Run test for collegiate males and females and Yo-Yo Intermittent test.
- Anaerobic Capacity: Margaria-Kalamen test and Wingate Anaerobic Test.

Unit-IV

Sports Skill Tests

- Badminton: Miller Wall Volley test and SAI Skill test.
- Basketball: Johnson Basketball Test and SAI Skill test.
- Cricket: Sutcliffe Cricket test.
- Hockey: Friedel Field Hockey Test and SAI Skill test.
- Volleyball: Russel-Lange Volleyball Test and SAI Skill test.
- Soccer: Warner Test for Soccer Skills and SAI Skill test.
- Tennis: Dyer Tennis Test.

Suggested Readings:

- Alan C. Lacy and Skip M. Williams. (2018). Measurement and Evaluation in Physical Education and Exercise Science (Ed. 8). Routledge.
- American College of Sports Medicine. (2013). ACSM's Health-Related Physical Fitness Assessment Manual. Lippincott Williams and Wilkins.
- American College of Sports Medicine (2017). ACSM's Health-Related Physical Fitness Assessment Manual. Lippincott Williams and Wilkins.
- Karad, P.L. (2017). Test, Measurement and Evaluation in Physical Education. Khel Sahitya Kendra.
- Lacy, A. C., and Williams, S. M. (2018). Measurement and Evaluation in Physical Education and Exercise Science. Routledge.
- Miller, D. (2019). Measurement by the Physical Educator Why and How (8th Edition). McGraw-Hill Higher Education.
- Yobu, A. (2010). Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. Friends Publications.

Course Code: MAPE-CC-203

Marks: (ESE=70+CCA=30) = 100

Course Title: Sports Biomechanics and Kinesiology

L	T	P	Cr
3	0	0	3

Course Outcomes:

On the completion of the course, the students shall be able to:

1. Comprehend the importance of kinesiology and Sports Biomechanics.
2. Identify and differentiate between the various muscle actions related to important joints.
3. Analyse different types of motion, force and their application in sports.
4. Develop an ability to identify and evaluate the principles of kinesiology and biomechanics in games and sports.

Unit-I

Introduction to Kinesiology and Sports Biomechanics

- Meaning, definition, characteristics, role and scope of kinesiology and sports biomechanics.
- Basic dimensions and units of measurement used in mechanics.
- Static and Dynamics- Kinematics and kinetics.
- Meaning and types of axes and planes and principles of movement.
- Scalars and vectors quantities.
- Concept of centre of gravity and line of gravity.
- Equilibrium and stability: Meaning, types and principles of equilibrium.

Unit-II

Structural Kinesiology, Location and Actions of Major Muscles

- Meaning and concept of structural kinesiology and its academic and professional objectives.

- Professional applications of structural kinesiology.
- The structural classification of skeletal muscles, characteristics of skeletal muscles and type of contractions.
- Classification of muscles produced movements.
- Methods of studying muscle actions.
- Muscle size and its force production.
- Origin, insertion and action of major muscles of neck, shoulder, elbow, wrist, trunk, hip, knee and ankle joint.

Unit-III

Kinematic and Kinetics of Human movement

- Meaning and definition of motion, types of motion: linear motion, angular motion and general motion.
- Newton's laws of motion and its applications games and sports.
- Projectile motion: Meaning, types, characteristics and factors affecting projectile motion.
- Force: Meaning, definition, components of force and its classification.
- Linear kinematics: Distance, displacement, speed, velocity and acceleration.
- Angular kinematics: Angular distance, angular displacement, angular speed, angular velocity and angular acceleration.
- Linear kinetics: Inertia, mass, weight, momentum and impulse.
- Angular kinematics: Eccentric force, couple of force, torque, moment of force, moment of inertia and angular momentum.
- Fluids mechanics: Air resistance, water resistance, density, flotation, buoyancy, lift and drag components and spin.
- Meaning of weight, pressure, work, power and energy (kinetic and potential).
- Friction: Meaning, types and principles of friction.
- Lever: Meaning, types, principles and their application.

Unit-IV

Methods of Analysis of Human Movements

- Meaning and types of movement analysis: Kinesiological, muscular, biomechanical and cinematographic.
- Methods of analysis: A qualitative and quantitative analysis.
- Instruments and software used in biomechanical analysis.
- Muscular analysis of movements of various joints: Shoulder joint, elbow joint, wrist joint, hip joint, knee joint, and ankle joint.
- Muscular analysis of fundamental motor skills: Running, jumping and throwing.
- Muscular and mechanical analysis of selected sports skills: Sprint start, shot put, long jump, push pass in football, tennis serve in volleyball, layup shot in basketball, straight hit in hockey and hook in boxing.

Suggested Readings:

- Ackland, T. R., Elliott, B., and Bloomfield, J. (2009). Applied Anatomy and Biomechanics in Sport. Human Kinetics.
- Bartlett, R. (2014). Introduction to Sports Biomechanics: Analyzing Human Movement Patterns. Routledge.
- Chapman, A. E. (2008). Biomechanical Analysis of Fundamental Human Movements. Human

Kinetics. Knowledge Warehouse.

- Kumar, P. (2019). Biomechanical Analysis of Forward Head Posture among Pondicherry University Research Scholars Based on the Laptop Working Hours: An Analytical Study. International Journal of Emerging Technologies and Innovative Research, 6 (6), 463-466.
- Kumar, P., and Singh, R. R. M. (2019). Biomechanical analysis of anisomelia among the young children's in Puducherry. Discrepancy (LLD), 330, 19.
- Singh, R. R. M. (2019). Biomechanical Analysis of Footprint Measurement among School Boys: A Positive Approach to Posture. Journal of the Gujarat Research Society, 21(1), 167-169.
- Uppal, A. K. (2018). Kinesiology and Biomechanics. Friends Publications.
- Williams M (1982) Biomechanics of Human Motion, Philadelphia; Saunders Co.

Discipline Elective Courses

Course Code: MAPE-EC-201

Marks: (ESE=70+CCA=30) = 100

Course Title: Sports Engineering

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Apply the concept of engineering and technology in sports.
2. Differentiate between different materials used in the field of sports.
3. Understand the mechanics of engineering materials in sports field.
4. Demonstrate and prepare programmes related to sports dynamics, facility management and performance assessment.

Unit-I

Introduction to Sports Engineering

- Meaning, definition, concept, aim and objectives of sports engineering.
- Concept of equipment and facility designing in sports: Sports related instrumentation, types of instrumentation, application and utility.
- Protective sports material: Materials used in the production of protective sports gear and their types.
- Sports surface material: Concept of sports surface and types of sports surfaces, their utility and role in enhancing sports performance.
- Sports shoe material: Design necessities of sports shoe material, manufacturing and importance of sports specific shoes.
- Balls and ballistics: Different types of material used in designing and manufacturing of balls and ballistics and their role in sports performance enhancement.
- Concept of aerodynamic principles.

Unit-II

Mechanics of Sports Engineering Materials

- Concepts of internal force, axial force, shear force, bending movement, torsion, energy method to find displacement of structure and strain energy.
- Biomechanics of routine and common activities: Gait, posture and body levers and ergonomics.

- Mechanical principles involved in movements namely: Walking, running, jumping, lifting, pulling, pushing and throwing.
- Motion coordinate system, Newton's laws of motion and human motion detection, its recording and assessment.
- Kinetics of particles: Work, energy, impulse and momentum.

Unit-III

Infrastructural Development

- Sports infrastructure: Gymnasium, swimming pool, indoor stadium, out-door stadium, pavilion, play park, academic block, administrative block, research block, conference hall, library, sports hostels etc.
- Requirements: Air ventilation, daylight, lighting arrangement, galleries, storerooms, office, toilet blocks (Male/Female), drinking water, sewage and wastewater disposal system, changing rooms (Male/Female), sound system (echo-free) and soundproofing mechanism.
- Internal arrangements according to need and nature of activity to be performed, corridors and gates for free movement of people.
- Emergency provisions of lighting, fire and exits, eco-friendly outer surroundings, maintenance staff and financial considerations.

Unit-IV

Maintenance and Life Cycle Costing

- Understanding the process of construction and requirements thereof.
- Building process: Design phase (including brief documentation), construction phase, functional (occupational) life, re-evaluation, refurbishing and demolition process.
- Maintenance policy: Preventive maintenance, corrective maintenance, record and register for maintenance.
- Basics of theoretical analysis of cost, total life cost concepts, maintenance costs, energy cost, capital cost and taxation.

Suggested Readings:

- Subic, A., & Haake, S. (2000). The engineering of sport research, development and innovation. Malden, Mass.: Blackwell Science.
- Franz K. F. et. al., Editor, Routledge Handbook of Sports Technology and Engineering (Routledge, 2013).
- Steve Hake, Editor, The Engineering of Sport (CRC Press, 1996).
- Franz K. F. etc. al., Editor The Impact of Technology on Sports II (CRC Press, 2007).
- Helge N., Sports Aerodynamics (Springer Science & Business Media, 2009).
- Youlin Hong, Editor Routledge Handbook of Ergonomics in Sport and Exercise (Routledge, 2013)
- Jenkins M., Editor Materials in Sports Equipment, Volume I (Elsevier, 2003).
- Colin White, Projectile Dynamics in Sport: Principles and Applications.

- Eric C. et al., Editor Sports Facility Operations Management (Routledge, 2010).

Course Code: MAPE-EC-202

Marks: (ESE=70+CCA=30) = 100

Course Title: Health Education and Sports Nutrition

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Comprehend the aim, objectives and principles of Health Education.
2. Identify the health-related problems at National and International level.
3. Develop an understanding about communicable and non-communicable diseases.
4. Recognise the importance of physical activity in weight management.
5. Prepare a diet plan for various competitions and nutrient supplements for performance.
6. Calculate calorific requirements for various sports and different age groups.

Unit-I

Health Education

- Meaning and definition of health, health education, health instruction and health supervision.
- Aim, objectives and principles of health education.
- Health services and guidance instructions in personal hygiene.
- Level of health care: Primary, secondary and tertiary.
- Concept of well-being and its components.
- Role of physical education professional as individual and in family in relation to health and health education.

Unit-II

Health Problems in India

- Communicable and non-communicable diseases, food and food related diseases and environmental health hazards.
- Effect of alcohol and tobacco on human health.
- Meaning, causes and management of hypertension and diabetes.
- Lifestyle management, stress management and stress related disorders.
- Role of health education department in school's health services and objectives of school health service.
- Role of state and union government in the protection of health and health policies of state and union government.
- Role of national and international organisations in the development of health i.e. WHO, UNICEF, and National Health Mission (NHM).
- Role of Non-Governmental organisations (NGO's) in the development of health.

Unit-III

Introduction to Sports Nutrition and Weight Management

- Meaning and definition of sports nutrition, role of nutrition in sports and basic nutritional guidelines.
- Nutrients: Fuel molecules for energy metabolism (carbohydrate, protein and fat).
- Role of carbohydrates, fats and protein during and after exercise.
- Calorific values in different food stuffs.

- Preparation of diet plan for normal male and female children, adults and elderly persons.
- Obesity: Meaning, definition, causes and management of obesity.
- Weight management program for children, adolescents, adults and elderly.
- Role of diet and exercise in weight management.

Unit-IV

Nutrition for Specific Sports

- Guidelines for nutrition in specific sports: Identifying individual energy; micronutrient and macronutrient requirements; nutrient timing; dietary periodisation and supplement usage.
- Nutrition for popular team sports (Hockey, Football, Volleyball, Kabaddi and Cricket).
- Nutrition for Athletics (Sprinters, middle and long-distance athletes, jumpers and throwers).
- Nutrition for Racket sports (Badminton, Tennis and Squash).
- Nutrition for Endurance Sports (Long Distance Swimming, Cycling and Marathon).
- Nutrition for Weight-dependent and Combat sports (Wrestling, Weightlifting, Judo, Boxing, Taekwondo and Wushu).
- Nutrition for water sports and coordination sports.

Suggested Readings:

- Campbell, B. (2013). Sports Nutrition: Enhancing Athletic Performance. CRC Press.
- Eberle, S. G. (2013). Endurance Sports Nutrition (Ed. 3). Human Kinetics.
- Fink, H. H., and Mikesky, A. E. (2017). Practical Applications in Sports Nutrition. Jones and Bartlett Learning.
- Kumar.P (2020). Changing The Lifestyle of Present Health Care: A Much Required Step for A Secured Future The Transmission or Reminder Ancestor's Way of Life once again. Alochana Chakra Journal. Vol. IX. Issue-V
- Maughan, R. J., and Shirreffs, S. M. (Eds.). (2013). Food, Nutrition and Sports Performance. Routledge.
- Reaburn, P. R. (Ed.). (2014). Nutrition and Performance In Masters Athletes. CRC Press.
- Ryan, M. (2012). Sports Nutrition for Endurance Athletes. Velo Press.
- Sharma, O.P., (2010). Handbook of Health Education and Sports. Khel Sahitya Kendra .
- Zinner, C., and Sperlich, B. (Eds.). (2016). Marathon Running: Physiology, Psychology, Nutrition and Training Aspects (pp. 1-171). Springer.

Course Code: MAPE-EC-203

Marks: (ESE=70+CCA=30) = 100

Course Title: Entrepreneurship in Physical Education

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Demonstrate entrepreneurial behaviour, skills and attitudes and build motivation towards an entrepreneurial lifestyle and occupation.
2. Feel the lifeworld of the entrepreneur and understand key entrepreneurial values.

3. Grasp the key generic entrepreneurship competencies in practice and apply the process of setting up an organisation.
4. Holistically develop and manage sustainable entrepreneurial organisation and develop the relationships they need to have with key stakeholders.
5. Elaborate the role of teachers and learners in Entrepreneurship Education.

Unit-I

Entrepreneurship in Physical Education

- Meaning, definition, need, concept, evolution and characteristics of entrepreneurship in physical education.
- Introduction to physical education entrepreneurship and technology ventures.
- Factors influencing entrepreneurship: Psychological, social, economic and environmental.
- Physical education Postgraduates as entrepreneurs.
- Common personality traits of successful entrepreneur and obstacles in front of an entrepreneur.
- Creating and selling the entrepreneurial value proposition.

Unit-II

Entrepreneurial Competencies and Technologies

- Entrepreneurial idea generation and feasibility analysis, technology commercialisation potential, paths and barriers from idea to market.
- Assessing and presenting the opportunities (students would be asked to give the complete business proposal presentation for the idea they generated).
- Entrepreneurial competencies: Creativity, out-of-the-box thinking, entrepreneurial education, risk taking attitude, problem-solving abilities, critical thinking, demand of efficiency and quality, networking, marketing and management skills.
- Value education in entrepreneurship education and entrepreneurial behaviour.

Unit-III

Business Planning and Execution

- Business structuring and strategy, business planning and the business plan, financial analysis, and projections.
- Market and competitive analysis, venture growth and value harvesting.
- Understanding about excise exemptions and concessions, exemptions from income tax and financial assistance from different agencies.
- Progression model for entrepreneurial education; active, process-based, project-centric and collaborative.
- Importance of entrepreneurial Education in business.

Unit-IV

Start-Up in Physical Education

- Case Analysis on achievement gaps and performance improvement of different ventures.
- Real-time interaction with entrepreneurs, business plan presentation, written business plan presentation and financial projections.
- Future perspectives of entrepreneurship in physical education.
- Prepare a proposal for the start-up of any educational/sports venture.
- Planning and execution of the business in Physical Education.
- Legal/ethical issues in establishing a physical education/sport venture.

Suggested Readings:

- Entrepreneurship Development: Indian cases on change agents, Tata McGraw Hill, K. Ramchandran.
- Aggrwal, A. (2013). Scope of Entrepreneurship development in India.
- Balasubramanian, A. (September 5, 2012). Entrepreneurship Education.
- European Commission (2008). Entrepreneurship in higher education, especially within non-business studies. Brussels: Final Report of the Expert Group.
- Erkkilä, K. 2000. Entrepreneurial education: mapping the debates in the United States, the United Kingdom and Finland, Abingdon, Taylor and Francis.
- Minniti, M. and Bygrave, W. 2001. A Dynamic Model of Entrepreneurial Learning. Entrepreneurship Theory and Practice, 25, 5-16.

Practical Courses (Skill Enhancement Courses)

Course Code: MAPE-LPC-201

Marks: (ESP-35+CCA-15) = 50

Course Title: Applied Statistics in Physical Education (Practical)

L	T	P	Cr
0	0	2	1

Course Outcomes:

On the completion of the course, the students shall be able to:

1. Explain the application of various statistical techniques.
2. Develop insight of the application of data analysis software.
3. Apply different statistical test through data analysis software.
4. Interpret the output of data analysis software.

Unit-1

1. Calculation of Chi-Square with SPSS/Excel.
2. Calculation of Correlation with SPSS/Excel.
3. Calculation of Z-ratio for testing the hypothesis with SPSS/Excel.
4. Calculation of t-ratio for dependent and independent groups with SPSS/Excel.
5. Calculation of the One Way ANOVA with equal and unequal sample sizes with SPSS/Excel.
6. Calculation of ANCOVA with SPSS/Excel.

Course Code: MAPE-LPC-202

Marks: (ESP-35+CCA-15) = 50

Course Title: Measurement and Evaluation in Physical Education (Practical)

L	T	P	Cr
0	0	2	1

Course Outcomes:

On the completion of the course, the students shall be able to:

1. Analyse different methods for testing cardio-respiratory functions.
2. Explain and measure the various anthropometric characteristics.
3. Assess the body composition of players.
4. Develop skills for the administration and interpretation of field tests.

Unit-I

1. Assessment of endurance through-twelve minutes run/walk test, six hundred yards run/walk test, Harvard step test and Yo-Yo Intermittent test.
2. Anthropometric measurements of the upper and lower extremities.
3. Assessment of body composition by skinfolds.
4. Basketball (Johnson basketball ability test)
5. Volleyball (Brady volleyball test and Russel-lange volleyball test)
6. Hockey (French hockey test and Friedel field hockey test)
7. Football (Mc Donald soccer test)
8. Badminton (Lockhart and Mcpherson badminton skill test)

Course Code: MAPE-LPC-203

Marks: (ESP-35+CCA-15) = 50

Course Title: Sports Biomechanics and Kinesiology (Practical)

L	T	P	Cr
0	0	2	1

Course Outcomes:

On completion of the course, the students shall be able to:

1. Examine the anatomical and fundamental position of standing, walking, and running.
2. Learn different methods for calculating gravity.
3. Develop insight for mechanical analysis of various techniques.
4. Explain actions of major muscles of body.
5. Develop insight to analyse the kinetic and kinematic parameters.

Unit-I

1. Analysis of fundamental skills: Walking, running, jumping, throwing, lifting, pulling, pushing, catching and climbing.
2. Mechanical analysis of any three sports skills.
3. Determination of center of gravity and line of gravity.
4. Anatomical standing position and fundamental standing position.
5. Methods of studying muscle actions: Textbook and drawing, conjecture and reasoning, inspection & palpation and Electromyography (EMG).
6. Manual calculations of various kinetic and kinematic parameters: Distance, displacement, speed, velocity, acceleration, momentum, force, mass, weight, pressure, work, power, energy etc.
7. Goniometry: Measurement of range of motion (ROM) at various joints.

Course Code: MAPE-PC-201

Marks: (ESP=70+CCA=30) = 100

Course Title: Jumping Events (Long Jump, Triple Jump, High Jump and Pole Vault)

Course Outcomes:

On completion of the course, students shall be able to:

1. Mark the field of jumping events with proper specification.
2. Explain the rules and regulations of the jumping events.
3. Learn fundamental skills and techniques of jumping events.
4. Demonstrate proper form and technique while performing each event.

L	T	P	Cr
0	0	4	2

5. Perform officiating and conduct the jumping events.
6. Identify the mechanical principles involved in skills and technique of jumping events.

Unit-I

- Historical development of jumping events at national and international levels.
- Rules and regulations of jumping events and their latest amendments.
- Warming-up and cooling down exercises for various jumping events.
- Mechanical analysis of jumping events.
- Fundamental skills and techniques of long jump.
- Fundamental skills and techniques of triple jump.
- Fundamental skills and techniques of high jump.
- Fundamental skills and techniques of pole vault.
- Drills and conditioning exercises for jumping events.
- Marking of Jumping events.
- Technical rules and duties of officials in jumping events.
- Officiating in jumping events.
- World record in jumping events.
- Training methods and means for the development of motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Schneider, R. C. (2009). Ethics of Sport and Athletics: Theory, Issues, and Application. Wolters Kluwer Health/ Lippincott Williams and Wilkins.
- Zeigler, E. F., and Spaeth, M. J. (1975). Administrative Theory and Practice in Physical Education and Athletics.
- <https://www.worldathletics.org/about-iaaf/documents/book-of-rules>
- <https://sportsauthorityofindia.nic.in/showimg.asp?ID=580>

Course Code: MAPE-PC-202

Marks: (ESP=70+CCA=30) = 100

Course Title: Individual Sports (Badminton, Boxing, Judo, Table Tennis, Wrestling and Weightlifting)

L	T	P	Cr
0	0	6	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Mark the field/court of respective games.
Learn fundamental skills and techniques related to games
3. Develop skill proficiency
4. Develop proficiency in Officiating and Conduct of the game.

5. Identify the mechanical principles involved in skills and technique of related games.

Unit- I

- Historical development of the games/sports at national and international levels.
- Controlling bodies of games/sports at national and international level.
- Major national and international competitions in games/sports.
- Rules and regulations of games/sports and their latest amendments.
- Layout and marking of play fields/grounds/courts and measurements/specification of equipment used in games/sports.
- Warming-up and cooling down exercises for games/sports.
- Fundamental skills of game/sport.
- Drills and lead-up Games.
- Training methods and means for the development of motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Geyer Dick (1977). Full Court Control Basketball. Parker Publishing Company, Inc. New York.
- Allen A.P. (1959). Handbook of Baseball Drills. Prentice-Hall, Inc. New York.
- Rose. H. Lee (2004). The Basketball Handbook. Human kinetics, USA.
- Anthony C. Varghese and Lawrence V. (2009). Volleyball Player. Handbook Friends Publication, New Delhi.
- Dumphy Mary and Wilde Rad (2000). Volleyball Today. 2nd Edition, Fritz/Brett.
- Ranganathan P.P. (2003). Volleyball, A Guide to Playing and Coaching. Friends Publication, Delhi.
- Soudhu S. Gurbaksh (1982). Volleyball Basic and Advanced. Sports People, Chandigarh.
- USA Volleyball. (2007). Coaching Youth Volleyball, 4th Edition, Human Kinetics.
- Wise Mary (1999). Volleyball Drills for Champions. Human Kinetics, Florida.
- D. Jain (2003). Hockey Skills and Rules. Khel Sahitya Kendra.
- Flint, Rachael, H. (1976). Women's Hockey London. Pelham Books Ltd.
- Kapur (1975). Rules of Hockey with Interpretation.
- P. Narang (2003). Play and Learn Hockey. Khel Sahitya Kendra.
- Wein, and Horts. (1979). The Science of Hockey. London: Pelham Books.
- Aneja, O.P. (2012). How to Play Cricket, Prerna Prakashan.
- Arora, Monika (2005). Cricket Coaching Manual. Sports Publication.
- Rachna. (2001). Play Better Cricket. Sports Publication.
- Srivastava, A.K. (2006). How to Coach Bowling. Sports Publication.
- Syal, and Meenu. (2004). Teach Yourself Cricket. Prerna Prakashan.
- Tyagi, and Arun Kumar. (2012). Cricket Skills and Rules. Khel Sahitya Kendra.
- Woolmer, and Bob. (2009). The Art and Science of Cricket. Firefly Book Limited.

Course Code: MAPE-PC-203
Course Title: Field Trip and Camping

Marks: ESP = 50

L	T	P	Cr
0	0	2	1

Course Outcomes:

On completion of the course, students shall be able to:

1. Elaborate the concept of camping and its management.
2. Develop a sense of responsibility, leadership qualities and perception of capacities of diverse pupil.
3. Organise an effective leadership camp with distinct activities.
4. Develop requisite skills to manage a prestigious institute/sports industry.

Unit-I

- Visit to reputed institutes of physical education and sports.
- Camping and leadership, aim, objectives and importance of camping.
- Organisation, selection, types of camp and layout of camp site.
- Learning basic of camping, basic skill/outdoor skill, hiking and trekking, night walk, river crossing. compass learning/orienteering/cooking/fire management/rope management.

Suggested Readings:

- Bright Charles K. and Herold C. Meyer. (1953). Recreational test and readings; Eaglewood cliff. New Jersey Prentice Hall.
- Ness wed, M.H. and New Meyer E.S. Leisure and Recreation, New York: Ronald Press.
- Kran, R.G (1958). Recreation and the schools. New York: Mac Melon Company.
- Shivers J.S., (1964). Principles and practices of Recreational services. London: Mac Melon Company.
- Butler George (1976). Introduction to Community recreation. Mc Gram Hill Book Company.
- Kelly, J. R (1982). Leisure Prentice. Hall Inc. Englewood Cliffs N.J.

Course Code: MAPE-PC-204
Course Title: Teaching Practice-II

Marks: ESP= 50

L	T	P	Cr
0	0	6	3

Teaching Experience:

- The M.A. (Physical Education) 2nd semester students need to develop proficiency in taking teaching lessons in selected games/sports discipline. In view of this, simulated teaching practice of 02 weeks will be conducted/organised in the university campus. In this simulated teaching practice, it would be compulsory for every student to undertake 10 supervised teaching lessons. Out of 10 lessons, three lessons (03) from track events, four lessons (04) from team games/sports and three lessons (03) of classroom teaching shall be taken by each student in playground/class itself. The Chairperson/or his/her nominee will certify that the candidate's lesson plan notebook is complete in all aspects and candidate has fulfilled all essential requirements pertaining to teaching practice.

Ability Enhancement Course

Course Code: MAPE-AEC-201

Marks: ESP = 50

Course Title: Intramural Activities-II

L	T	P	Cr
0	0	2	1

Course Outcomes:

On completion of the course, students shall be able to:

1. Acquire relevant skills in various Sports and Games.
2. Develop good judgment and fair play in competitions.
3. Enhance teamwork and leadership skills.
4. Develop social interaction/team cohesion among diverse demographic representations through play.
5. Imbibe organising proficiency in various sporting events.

Unit-I

- Introduction to intramural.
- Orientation and house distribution.
- Appointment of house bearers and house masters.
- Framing of rules and regulations of inauguration of intramural competitions.
- March past and placard display.
- Orientation of rules and regulations.
- Competition planning, organising, officiating, participating and overall management of Badminton, Boxing, Judo, Table Tennis, Wrestling, Weightlifting and Track and Field events.
- Competition planning, organising, participating and overall management of quiz competition, singing and dance competition.

Generic Elective Course

Course Code: MAPE-GEC-201

Marks: (ESE-70+CCA-30) = 100

Course Title: Health and Fitness Management

L	T	P	Cr
4	0	0	4

Course Outcomes:

On completion of the course, the students shall be able to:

1. Understand the concept of holistic health through fitness and wellness.
2. Apply the means and methods of fitness development.
3. Design different models of nutritional requirements for good health.
4. Describe the contemporary health issues and weight management techniques.

Unit-I
Health and Health Education

- Meaning, definition, aim and objectives of health and health education.
- Principles and importance of health education.
- Prominent health problems in India.
- Health education programmes in India.
- National health policy-2017 and major national health related initiatives: Ayushman Bharat, Pradhan Mantri Jan Arogya Yojna, Mukya Mantri Himachal Health Care Scheme (HIMCARE) and Health and Wellness Centres.
- International health agencies and their roles: WHO, UNICEF, World Bank and International Red Cross and Red Crescent Movement.
- Modern lifestyle and hypokinetic diseases, their prevention and management.
- Physical activity and health benefits.

Unit-II
Physical Fitness and Exercise Programme

- Meaning, definition and concept of physical fitness.
- Components of physical fitness: Health related fitness and skill related fitness.
- Principles of physical fitness.
- Factor affecting physical fitness.
- Importance of fitness in present scenario.
- Means of fitness development: Aerobic and anaerobic exercises.
- Heart rate zones for various aerobic exercise intensities.
- Concept of designing different fitness training programmes for different age group.

Unit-III
Nutrition and Exercise

- Meaning and definition of nutrition.
- Basic concept of food, essential nutrients and balanced diet.
- Implications of Balanced diet on healthy lifestyle.
- Concept of pre-exercise, during exercise and post exercise meal.
- Daily calories intake and burning.
- Human energy system: Aerobic and anaerobic systems of energy.
- Metabolic effects of exercise.

Unit-IV
Stress Management and Obesity

- Stress: Meaning, types, causes, assessment and its management.
- Emphasis on proper rest, sleep and dreams.
- Healthy living and positive lifestyle.
- Obesity: Meaning, types, causes, problems associated with obesity and management of obesity.
- Concept of weight management, diet plan, weight loss, weight gain and fad diet.

- Role of diet and physical activity in weight management.
- Concept of body composition and Body Mass Index (BMI).
- Misconceptions about spot reduction.
- Dieting versus exercise for weight control.

Suggested Readings:

- Agrawal, M. (2016). *Aerobics Fitness and Style*. Friends Publications.
- Corbin, C. (2011). *Concepts of Physical Fitness*. McGraw-Hill Higher Education.
- Fahey D. Thomas (2005). *Weight Training Basis, A Complete Guide for Men and Women*. Mcgraw- Hill Companies.
- Greenberg, J., Dintiman, G., and Myers Oakes, B. (2004). *Physical Fitness and Wellness*. Champaign, IL: Human Kinetics.
- Hoeger, W., and Hoeger, S. (2013). *Fitness and Wellness*. Wadsworth, Cengage Learning.
- Prabha, S. (2015). *Basic Fitness Assessment*. Friends Publications.
- Rathee, S. (2017). *Physical Fitness and Wellness*. Friends Publications.
- Robert Malt. (2001). *90-Day Fitness Plan*. D.K. publishing, Inc. 95, Madison Avenue.
- The National Association for Sport and Physical Education (1900). *Concepts of Physical Education, What Every Student Needs to Know*. Association Drive Reston.
- Uppal, A.K. (2016). *Physical Fitness and Wellness*. Friends Publications.

Semester-III

Core Courses

Course Code: MAPE-CC-301

Marks: (ESE=70+CCA=30) = 100

Course Title: Science of Sports Training

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Understand the principles and importance of sports training.
2. Explain different means and methods for the development of motor abilities.
3. Understand the concept of technical and tactical training for the preparation of teams.
4. Prepare training programmes for the development of different motor abilities.
5. Assess the player's ability for the selection in suitable sports on the basis of their talent.

Unit-I

Introduction to Sports Training

- Meaning, definition, aim, objectives, characteristics and principles of sports training.
- Training load: Definition, types, components of training load, factors affecting training load, load and adaptation and super compensation.
- Overload: Definition, causes of over load, symptoms of overload and tackling of overload.
- Phases, means and methods of recovery.

Unit-II

Bio-Motor Abilities and their Development

- Strength: Meaning, definition, types, factors affecting strength and methods to improve strength.
- Speed: Meaning, definition, types and factors affecting strength and methods to improve speed.
- Endurance: Meaning, definition, types and factors affecting strength and methods to improve endurance.
- Flexibility Meaning, definition, types and factors affecting strength and methods to improve flexibility.
- Coordinative abilities: Meaning, definition, types and factors affecting strength and methods to improve coordinative abilities.
- Special type training: Plyometric training, cross training and high-altitude training.

Unit-III

Technical and Tactical Preparation

- Meaning of technique, skill and style.
- Characteristics of technique and phases of skill acquisition.
- Methods employed for technique training, causes of technical faults and their correction.
- Meaning and definition of tactics.
- Aims of tactical training according to sports, difference between strategy and tactics.
- Means of tactical training and training for tactics.

Unit-IV
Training Plan, Competition and Talent identification

- Planning: Meaning, definition, objectives, importance and principles of planning.
- Training Plan: Micro-cycle, meso-cycle, macro-cycle, short term plan and long-term plans.
- Periodisation: Meaning, definition, types, aims and contents of various phases of periodization.
- Competition: Meaning, definition, importance and systems of competition.
- Talent identifications: Meaning, definition, objectives, importance, phases, principles for talent identification and different methods of talent identification.

Suggested Readings:

- Bompa, T. O., and Buzzichelli, C. (2018). Periodization-: Theory and Methodology of Training. Human kinetics.
- Bompa, T., Bompa, T. O., and Carrera, M. (2005). Periodization Training for Sports(Ed. 2). Human Kinetics.
- Jesudoss,S. J. (2015). Principles of Sports Training. Friends Publications.
- Kurz, T. (2001). Science of Sports Training: How to Plan and Control Training for Peak Performance. Stadion.
- Loehr, J. E. (1995). PDF The New Toughness Training for Sports: Mental Emotional Physical Conditioning From One of the Worlds Premier Sports Psychologists Online Book.
- OBE, F. W. D. (2014). Sports Training Principles: An Introduction to Sports Science. Bloomsbury Publishing.
- Singh, H. (1984). Sports Training: General Theory and Methods. Netaji Subhas. Nat. Inst. of Sports.
- Viru, A. (2017). Adaptation in Sports Training. Routledge.

Course Code: MAPE-CC-302

Marks: (ESE=70+CCA=30) = 100

Course Title: Sports Psychology

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Understand the importance of sports psychology and use different theories of learning in classroom/playfield/real life situations.
2. Develop understanding about various motor learning and leadership theories.
3. Assess the personality of an individual and recognise the role of individual differences in sports.
4. Develop the concept of psychological factors affecting sports performance.
5. Apply the theories of motivation for performance enhancement and coping with stress, anxiety and aggression.

Unit-I

Introduction to Sports Psychology, Learning and Motivation

- Meaning, definition and importance of sports psychology in enhancement sport performance.
- Methods of Sports Psychology: Introspection, observation, experimental, clinical and project method.
- Meaning, definition and characteristics of learning, theories of learning (Thorndike's trial and error theory, Gestalt's theory of learning by insight and Ivan Pavlov's theory of classical conditioning/respondent conditioning) and their implications in teaching the learning process.
- Meaning, definition, types and importance of motivation.
- Theories and techniques for developing motivation.
- Effect of spectator and media on individual and team sports.

Unit- II

Motor Learning and Leadership in Sports

- Motor learning: Meaning, definition, stages, plateau effects of motor learning; motor learning in sports.
- Theories of motor learning (Adam's Closed Loop Theory and Ecological Theory).
- Transfer of learning/training, learning curve and plateau.
- Differentiation and classification of motor skills and sports skills.
- Meaning, definition, types of leadership and components of effective leadership.
- Coach-leadership in sports: Fiedler's Contingency theory and Path-goal theory.

Unit-III

Personality and Cognitive Process

- Personality: Meaning, definition, traits and factors affecting personality.
- Theories of personality: Humanistic theory, Trait theory, Psychoanalytic theory, Behavioral theory, Psycho-dynamic theory and Social Cognitive theory.
- Role of personality in sports, physical education and exercise.
- Measurement of personality:
 - I. Eysenck Personality Inventory- Revised (EPQ-R).
 - II. Cattle's 16 Personality factors Questionnaire (16 PF)
 - III. NEO Personality Inventory (Revised)
- Individual difference: Meaning, types, causes and importance of individual differences in sports.
- Meaning, types, uses and techniques of cognitive process: Relaxation technique in sports, imagery in sports, cognitive technique for building confidence, progressive muscle relaxation (PMR), biofeedback, autogenic training and deep breathing.

Unit- IV

Psychological Factors, Group Dynamics, Problems and Issues with Teams in Sports

- Psychological factors affecting sports performance: Emotion, anxiety, aggression, stress, self-confidence, concentration, mental toughness and goal setting.
- Concept of group dynamics and team cohesion, characteristics of team cohesion, development and measurement of cohesion.
- Application of psychological skill training

- Psycho-social aspect of differently abled pupil.
- Problems and issues faced while working with individual and team sports.
- Career transition in athletes, retirement issues and developing life skills in athletes.

Suggested Readings:

- Horn, Thelma (2008). Advances in Sport Psychology. Champaign IL : Human Kinetics Publishers, Inc.
- Huber, Jeffrey (2012). Applying Educational Psychology in Coaching Athletes. Knowledge Warehouse.
- Kamlesh, M.L. (2011). Psychology in Physical Education and Sport. (Ed. 3). Delhi Metropolitan Book Co. Pvt. Ltd.
- Pargonkar, G. V (2015). Sports Psychology. Friends Publications.
- Taylor, Jim (2017). Assessment in Applied Sport Psychology. Knowledge Warehouse.
- Weinberg, R.S and Gould, Daniel (2015). Foundations of Sport and Exercise Psychology (Ed. 6). Champaign IL: Human Kinetics Publishers, Inc.

Course Code: MAPE-CC-303

Marks: (ESE=70+CCA=30) = 100

Course Title: Sports Medicine and Athletes Care

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

- Develop an understanding about sports medicine and its significance.
- Critically analyse the role of various therapeutic modalities for athlete’s care and rehabilitation.
- Demonstrate and apply the different techniques of massage.
- Summarise the roles and responsibilities of national and international organisations responsible for anti-doping programmes.
- Develop insight about management of sports injuries.

Unit-I

Introduction to Sports Medicine

- Meaning of the terms: athlete, fitness, wellness, performance, care, rehabilitation and sports medicine.
- Concept of sports medicine: Aim and objectives, scope, need and importance of sports medicine in physical education and sports.
- Preventive principles and safety measures in sports.
- First aid: Meaning, types and principles of first aid.
- Role of physical educator/athletic trainer, coach, player and sports physician in sports medicine.
- Career opportunities in sports medicine.

Unit-II

Sports Injuries

- Meaning, definition, causes, classification and identification of sports injuries- traumatic and chronic (overuse) injuries.
- Common sports injuries: Sprain, strain, contusion, dislocation, fracture, bruised heel, corns, toe nail

problem and skin wounds.

- Specific sports injuries: Head, face, neck, spine and thorax injuries, shoulder, elbow and wrist injuries, hip knee and ankle injuries.
- Strapping and aiding equipment's for common and specific sports injuries.
- Common treatment of soft tissue injuries.

Unit-III

Therapeutic Modalities and Rehabilitation Exercises

- Meaning, definition, uses and importance of therapeutic modalities in physical education and sports.
- Cryotherapy modalities: General description of ice massage, cold hydrocollator packs, cold whirlpool, cold spray, contrast baths, ice immersion, cold compression, and cryokinetics.
- Hydrotherapy modalities: General description of saunas, steam baths, foot baths, sitz baths, and the application of cold and hot water compresses.
- Thermotherapy modalities: General description of hot packs, wax baths, towels, sunlight, saunas, heat wraps and steam baths/rooms.
- Electrotherapy modalities: General description of Transcutaneous Electrical Nerve Stimulation (TENS), Therapeutic Ultrasound, Electroacupuncture, Shockwave Therapy and Electrical Muscle Stimulation (EMS).
- Rehabilitation: Meaning, principles and types of rehabilitation exercises- passive, active, assisted, resisted, stretching and PNF techniques.

Unit-IV

Massage, Food Supplements and Doping in Sports

- Massage: Meaning, Definition, types, principles and benefits of massage.
- Food supplements: Meaning, types and their role in sports performance.
- Planning and justification of athletic diets for different categories of sports.
- Doping: Meaning, definition, classes, methods of doping, all time and in-competition prohibited substances and methods in sports.
- Procedure and sampling at National and Inter National levels.
- WADA and NADA and their role in controlling drug abuses in sports.

Suggested Readings:

- American College of Sports Medicine (2019). ACSM's Body Composition Assessment with Web Resource. Knowledge Warehouse.
- Bindal, V.D. (2016). Therapeutic and Sports Massage. Agra: Associated Publishing House.
- Johnson, J. C. (2011). Postural Assessment. Human Kinetics.
- Kumar, P. (2019). Management of Obesity Induced Forward Head Posture Deformities Through Sports. International Journal of Physical Education, Sports and Health.
- Madden, C. and Netter, F. (2010). Netter's Sports Medicine. PA: Philadelphia. Saunders/ Elsevier.
- Norris, C. M. (2018). Sports and Soft Tissue Injuries: A Guide for Students and Therapists. Routledge.

- Singh, A. (2014). Complete Guide to Sports Injuries. Friends Publications.
- Singh, A. (2016). Athletic Care and Rehabilitation. Friends Publications.
- Uppal, A. K. (2015). Posture, Athletic Care and First Aid. Friends Publications.

Course Code: MAPE-CC-304

Marks: (ESE=70+CCA=30) = 100

Course Title: Professional Preparation in Physical Education

L	T	P	Cr
4	0	0	4

Course Outcomes:

On completion of the course, the students shall be able to:

1. Appear proficiently in UGC-NET Paper-II.
2. Develop confidence and prepare for various state and central-level eligibility tests.
3. Develop a better understanding of various core physical education dimensions.

Unit-I

Physical Education and its Psycho-Sociological Aspects

- Physical education and adapted physical education, their objectives, and Philosophies of education as applied to physical education.
- Recreational programmes for various categories of people, wellness- its importance, benefits and challenges.
- Social aspects of sports: Sports as a socializing agency, social values and sports as cultural heritage and social aspects of competition.
- Ancient and Modern Olympics Games, Asian and Commonwealth Games. Prominent honors and awards in games and sports.
- Structure and functions of international and national bodies controlling various games and sports.
- Sports psychology and its importance in the field of physical education and sports.
- Types and theories of motivation and personality, psychological factors affecting sports performance, group dynamics, group cohesion and leadership in sports.

Unit-II

Physiological, Kinesiological and Biomechanical Aspects of Physical Education

- Cardio-respiratory adaptations to long and short-term physical activities.
- Muscle: types, characteristics and microscopic structure of muscle fiber. Sliding filament theory of muscular contraction.
- Neuro-muscular junction and transmission of nerve impulse.
- Aerobic and anaerobic systems during rest and exercise, environmental influence on human physiology under exercise.
- Physiological response of various therapeutic modalities and rehabilitation. Ergogenic aids and their physiological aspects.
- Joints and their movements. planes, axes and levers.
- Laws of motion and their application in sports, linear and angular kinematics and kinetics, friction, spin, impact, elasticity and projectile.

- Kinesiological, muscular and mechanical analyses of fundamental movements and major sports skills.

Unit-III

Teacher Education, Health Education and Management Aspects of Physical Education

- Development of teacher education for physical education in India. Comparative study of professional preparation in physical education of India with other countries. Concepts and principles of curriculum planning.
- Professional and other courses of physical education in India. Role of public and private sectors, and recent government policies in the promotion of physical education and sports in the country.
- Concept of health. Importance and principles of health education. International and national health-promoting government and private agencies.
- Communicable diseases cause, symptoms, prevention through other means and immunization. Balanced diet and its components. Nutritional requirements according to the nature of sports.
- Psychosomatic disorder/sedentary life style diseases, obesity and its related health problems.
- Concepts and principles of management, organisation and functions of sports bodies. Scope of management in physical education and sports. Guiding principles for organising physical education and sports programmes in institutions. Planning and preparation of the budget.
- Objectives, principles and importance of supervision. Duties and responsibilities of a supervisor/sports manager. Planning and management of sports infrastructure and event management. Public relations and mass media.

Unit-IV

Sports Training, Research Methods, Measurements and Evaluation in Physical Education

- Sports training: Characteristics and principles of sports training. Training load, its features, principles and adaptation process. Means and methods of executing training load. Means and methods of development of bio-motor abilities.
- Technique and skill: Its characteristics and importance. Different stages of technological development and technique training. Tactics and strategy.
- Periodisation: Its importance, objectives and types of periodization. Concept of different periods-Preparatory, competition and transitional.
- Classification and ethical issues in research. Identification and formulation of the research problem. Research hypotheses: Its types, formulation and testing.
- Descriptive, historical and experimental methods of research. Experimental research designs. Probability and non-probability sampling. Various tools of data collection.
- Statistics: Parametric and non-parametric statistical techniques in research. Types of data and normal probability curve. Preparation of research proposal, report, abstract and paper for publication and presentation.
- Types and importance of tests, measurements and evaluation in physical education and sports. Construction of test, criteria for selecting an appropriate test and administration of the testing programme.

- Tests of physical fitness, motor fitness, motor ability and motor educability. Sports skill tests for badminton, basketball, football, hockey, tennis, and volleyball. Tests for anxiety, aggression, team cohesion, achievement motivation, mental toughness, and self-efficacy.

Discipline Elective Courses

Course Code: MAPE-EC-301

Marks: (ESE=70+CCA=30) = 100

Course Title: Sports Journalism and Mass Media

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Explain the concept of mass communication and sports journalism.
2. Organise sports news desk.
3. Prepare the general news report and sports news report.
4. Understand the art of commentating and interviewing.
5. Analyse the carrier opportunities in sports journalism.

Unit-I

Introduction to Sports Journalism and Mass Communication

- Meaning, definition of mass communication and sports journalism, scope, ethics and historical background.
- National and international sports news agencies.
- Mode of sport journalism: Print, electronic and other informal media.
- Sport journalism: Trends, theories and essential skills for sports journalism.
- Sports journalist: Types, characteristics, role and responsibilities of sports journalist.
- Career Avenues in sports journalism and mass communication.

Unit-II

News Writing/ Sports Bulletin

- News: Definition, basic news elements, organisation of sports news desk and pitfalls in use of language, proof reading, qualities and responsibilities of sports news reporter/correspondent.
- News writing: Principles and types of news writing, interview, column writing, feature writing, review writing, radio news writing and T.V. news writing.
- Writing news headlines in newspaper and magazines- Heading of sports news: theories of sports news headings and its importance.
- Organisation of pre and post sports event press meet.
- Coverage: Covering local/national/international sports competitions and writing of press release. Preparation of general news report and sports news report.
- Analysis of sports news.

Unit-III

Report Writing on Sports

- Review writing: Brief review of Olympic Games, Asian Games, Common Wealth Games, World Cup, National Games and Indian Traditional Games.
- Writing sports features: Meaning, types and importance of sports features. Sports personalities and their thumb nail sketches, writing sports editorials, blogs and columns.

- Art of commentating and interviewing: Commentating sports for radio and television channels and interview with elite players and coaches.
- Methods of preparing handouts, brochures, jingles, mascots, reports, punch line and slogan for society to communicate the importance of sports.
- Advertisement in sports journalism.

Unit-IV Mass Media

- Mass media in sports journalism: Meaning, role and types mass media (newspaper, radio and TV) and Sports expert's comment. role of advertisement in sports journalism.
- Photo journalism: Meaning and forms of photo journalism, methods and equipment of photography and videography, selection of visuals and its impact on mass communication.
- Techniques of photography and videography. Career in sports photography.
- New media: Meaning, types, use and impact of new media on sporting personalities and sports. Writing for web and social media (Facebook, WhatsApp, Youtube, Instagram and telegram etc.) and importance of new media in present scenario.

Suggested Readings:

- Dhananjay Joshi (2010). Value Education in Global Perspective. Lotus Press.
- Kathryn T. Stofer., and James R. Schaffer (2019). Sports Journalism: An Introduction to Reporting And Writing. Rowman and Little field Publishers.
- Koak, S and Sharma, R. (2015). Media and Career in Phy Edu. Friends Publications.
- Lal, R. (2013). Sports Journalism. Friends Publications.
- Malik, (2010). Sports Journalism and Mass Media. Friends Publications.
- Phil Andrews (2013). Sports Journalism (Ed. 2). SAGE Publications Ltd.

Course Code: MAPE-EC-302

Marks: (ESE=70+CCA=30) = 100

Course Title: Information and Communication Technology (ICT) in Physical Education

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of this course, the students shall be able to:

1. Understand the concept of ICT in the field of Physical Education and sports.
2. Offers hands-on knowledge of MS Office and multimedia.
3. Communicate ideas confidently and present information accurately with the use of ICT.
4. Analyse the issues related to internet, networking, E-learning and cyber security.

Unit-I

Introduction of ICT in Physical Education

- Meaning, concept, elements, process, types, need and importance of communication. Communicative skills: Listening, speaking, reading and writing.
- Meaning, concept, need and importance of ICT in physical education.
- Scope of ICT in teaching learning process, publication, evaluation and research.
- Administrative challenges in integrating and implementing ICT in Physical Education.

Unit-II

Fundamental Computers

- Meaning, types, characteristics and applications of computers in sports and physical education. Computer Hardware: Input, output and storage devices.
- Computer software: Concept and types of computer software. Computer memory and its types. Computer viruses and its management.
- Concept, types and functions of computer networks, internet and its applications.
- Web browsers and search engines; legal and ethical issues in web browsing.
- Identification of the advanced technologies in computer science and their applications in the field of physical education and sports.

Unit-III

Microsoft Word and Excel

- MSWord: Main features and its uses in physical education and sports.
- MS Excel: Main features and its uses in physical education and sports.
- MS Access: Creating a database, creating a table, queries, forms and reports on tables and its uses in physical education and sports.
- MS PowerPoint: Preparation of slides with multimedia effects.
- Development of Google form.
- Multimedia: Preparation of poster, brochure, handbill, poster card etc.

Unit-IV

E-Learning, Web Learning and Cyber Security

- E-learning and web-based learning: Definition, characteristics and advantages of E-learning and web-based learning.
- Role of E-learning and web-based learning in Physical Education and sports.
- Concept and utility of the visual classroom, mail merging and video conferencing.
- Grammar and spellcheck through web browsers.
- Cyber Security: Introduction, security services, types of attacks, cybercrime, online fraud and identity theft, desktop security and email & web security.

Suggested Readings:

- Ambedkar, A. (2019). Advanced Computing and ICT in Physical Education. Friends Publication.
- Gupta, R. (2019). Education Technology in Phy Edu, Friends Publication. Friends Publication.
- Gupta, R. (2019). Information and Communication Technology (ICT) in Physical Education. Friends Publication.
- Singh, D. (2019). Educational Technologies and Methods of Teaching in Physical Education. Friends Publication.
- Singh, T. N. (2019). Computer Application in Physical Education. Friends Publication.

Course Code: MAPE-EC-303

Marks: (ESE=70+CCA=30) = 100

Course Name: Gender, Disability and Inclusive Sports Education

L	T	P	Cr
3	0	0	3

Course Outcomes:

On completion of the course, the students shall be able to;

1. Comprehend the various aspects of gender inequality.
2. Develop understanding on different types of disability.
3. Elaborate the constitutional provisions for gender equality in India.
4. Apply the specific adapted programme for children with diverse needs.

Unit-I

Understanding and Construction of Gender

- Defining gender and features of gender inequality.
- Gender inequality in education in India.
- Gender-based violence as a development and rights challenge.
- Historical roots of gender construction in India: Patriarchy and its sociocultural origins.
- Impact of gender as a social construct.
- Gender roles and the female stereotype in India.
- The global gender equality agenda.

Unit-II

Gender and Schooling

- Gender issues in access to education and physical education.
- Quality of work and equal opportunity.
- Gender issues in the physical education classroom and peer interactions.
- Gender issues in participation in sports.
- Constitutional provisions for education of women in India.
- Programmes of women education in India.
- Women empowerment through sports participation.

Unit-III

Disability and Associated Problems

- Meaning and concept of disability.
- Physical disability: Characteristics, categories, functional limitations, general causes and management.
- Mental retardation and learning disability: Characteristics, category, functional limitations and general causes and management.
- Hearing and speech impairment: Characteristics, category, functional limitations and general causes and management.
- Visual impairment: Characteristics, category, functional limitations and general causes and management.
- Behavioural problems associated with disability: Adjustment problem, emotional problem, personality problem, social problems, social stigma, discrimination and social rejection.

Unit-IV

Inclusive Education

- Meaning, definition, concept and importance of inclusive education.

- Historical perspectives on education of children with diverse needs.
- Difference between special education, integrated education and inclusive education.
- Physical education programme for disabled children of elementary school, middle school and high school.
- Building inclusive learning friendly sports facilities and overcoming barriers for inclusion.
- Advantages of inclusive sports education for children.
- Role of teachers, parents and other community members for supporting inclusion of children with diverse needs for participation in sports.

Suggested Readings:

- Auxter, H. (2001). Adapted Physical Education and Reactions. Morbey- St: Louis Mirrauri.
- Auxter, D., and Pyfer, J. (1989). Principles and Methods of Adapted Physical Education and Recreation. Times Mirror Magazine.
- Clarke, H. H., and Clarke, D. H. (1978). Developmental and Adapted Physical Education.
- Kasser, Susan (2013). Inclusive Physical Activity (2nd Edition). Knowledge Warehouse Khel.
- Kumar, P., Singh, R. M., and Ratnakar, A. (2018). Role of physical education research activities and their impact in modern day life. Asian Journal of Multidimensional Research.
- Sahitya Kendra (2017). A Text Book of Adapted Physical Education and Sports.
- Sharma, S.R (2019). Adapted Physical Education, Friends Publication.
- Thind, M. N. (2010). Special Olympics Bharat Trainer Manuel. Special Olympics Bharat.
- Winnick, J., and Porretta, D. L. (2016). Adapted Physical Education and Sport (Ed. 15). Human Kinetics.

Skill Enhancement Courses (Practical Courses)

Course Code: MAPE-LPC- 301

Marks: (ESP-35+CCA-15) = 50

Course Title: Sports Psychology (Practical)

L	T	P	Cr
0	0	2	1

Course Outcomes:

On completion of the course, the students shall be able to:

1. Explain the use of reaction time, coordination and anticipation time assessment instrument.
2. Outline the scales used for anxiety, motivation and personality.
3. Comprehend the applications of psychological testing in various settings.
4. Identify the role of creativity and kinesthetic perception in sports performance.

Unit-I

- Assessment of reaction time (Hand-eye and foot-eye).
- Assessment of coordination (Hand-eye and foot-eye).
- Assessment of anticipation time.
- Analysis of personality (Eysenck personality questionnaire) and Big five personality test.
- Assessment of achievement motivation.
- Assessment of sports competitive anxiety.
- Assessment of kinaesthetic perception.
- Assessment of Creativity.

Course Code: MAPE-LPC-302

Marks: (ESP-35+CCA-15) = 50

Course Title: Sports Medicine, Athletes Care and Rehabilitation (Practical)

L	T	P	Cr
0	0	2	1

Course Outcomes:

On completion of the course, the students shall be able to:

1. Identify common and specific sports injuries.
2. Demonstrate and practice of various therapeutic modalities.
3. Perform different techniques of massage.
4. Exhibit and apply various rehabilitation exercises.

Unit-I

- Identification of common and specific sports injuries.
- Demonstration and practice of first aid for common and specific sports injuries.
- Demonstration and practice of various therapeutic modalities: Cryotherapy, hydrotherapy, thermotherapy and electrotherapy.
- Demonstration and practice of most commonly used massage techniques in the treatment of sports injuries.
- Demonstration and practice of passive, active, assisted, resisted, stretching exercises for rehabilitation.

Course Code: MAPE-PC-301

Marks: (ESP=70+CCA=30) = 100

Course Title: Throwing Events (Shot Put, Discus, Javelin and Hammer Throw)

L	T	P	Cr
0	0	4	2

Course Outcomes:

On completion of the course, the students shall be able to:

1. Mark the field of throwing events with proper specification.
2. Explain the rules and regulations of the throwing events.
3. Learn fundamental skills and techniques for throwing events.
4. Demonstrate proper form and technique while performing each event.
5. Perform officiating and conduct the throwing events.
6. Identify the mechanical principles involved in skills and techniques of throwing events.

Unit-I

- Historical development of throwing events at national and international levels.
- Rules and regulations of throwing events and their latest amendments.
- Warming-up and cooling down exercises for various throwing events.
- Mechanical analysis of throwing events.
- Fundamental skills and techniques of shotput.
- Fundamental skills and techniques of discus throw.
- Fundamental skills and techniques of javelin throw.
- Fundamental skills and techniques of hammer throw.

- Drills and conditioning exercises for throwing events.
- Marking of throwing events.
- Technical rules and duties of officials in throwing events.
- Officiating in throwing events.
- World record in throwing events.
- Training methods and means for the development of motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Schneider, R. C. (2009). Ethics of Sport and Athletics: Theory, Issues, and Application. Wolters Kluwer Health/ Lippincott Williams and Wilkins.
- Zeigler, E. F., and Spaeth, M. J. (1975). Administrative Theory and Practice in Physical Education and Athletics.

Suggested Websites:

- <https://www.worldathletics.org/about-iaaf/documents/book-of-rules>
- <https://sportsauthorityofindia.nic.in/showimg.asp?ID=580>

Sports Specialization-I (Student can opt any one of the following courses)

Course Code: MAPE-PC-302

Marks: (ESP=70+CCA=30) = 100

Course Title: Badminton-I

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I
Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.
- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

References:

- Downey, J. C., and Brodie, D. (1980). Get fit for badminton: a practical guide to training for Players and Coaches. Pelham Books.
- Downey, Jake (1993). Winning Badminton Doubles How to coach Badminton. Published by Jake Downey.
- Downey, Jake (1982). Better Badminton for All. Pelham Books .
- Downey, Jake (1993). Excelling at Badminton (Beyond the Basics). Teach Yourself Books.
- Downey, Jake (2007). Tactics in Badminton Singles. e-book.
- Grice (2007). Badminton Steps to Success (2nd Edition). Human Kinetics.
- John Edwards (1997). Badminton: Technique, Tactics, Training (Crowood Sports Guides).The Crowood Press Ltd.
- Mark Golds (2002). Badminton (Series - Skills of the Game). The Crowood Press Ltd.

Course Code: MAPE-PC-303

Marks: (ESP=70+CCA=30) = 100

Course Title: Basketball-I

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.

- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

References:

- OBE, F. W. D. (2014). Sports Training Principles: An Introduction to Sports Science. Bloomsbury Publishing.
- Geyer, D. (1977). Full Court Control Basketball: A Flexible Offense to Exploit Opponents' Weaknesses. Parker Publishing Company.
- Allen, A. P. (1959). Handbook of Baseball Drills. Prentice-Hall.
- McGuire Frank. (1959). Defensive basketball. Prentice-Hall, Inc. New York.
- Kanika K. (2001). Basketball Coaching Manual. Sports Publication.
- Vaidhya and Rajesh. (2007). Skills and Tactics Basketball. Sports Publication. New Delhi.
- Boe, Clair and Norton (1959). Men to Men Defense and Attack. New York: Ronald Press Company.

Course Code: MAPE-PC-304

Marks: (ESP=70+CCA=30) = 100

Course Title: Cricket-I

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.

- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Aneja, O.P. (2012). How to Play Cricket. Prerna Prakashan.
- Arora and Monika. (2005). Cricket Coaching Manual. Sports Publication.
- Bharadwaj and Arun. (2008). Coaching Batting Skills. Royal Colour Cartons.
- Kutty Suresh. (2003). Fielding Drills in Cricket. Sports Publication.
- Rachna. (2001). Play Better Cricket. Sports Publication.
- Srivastava, A.K. (2006). How to Coach Bowling. Sports Publication.
- Srivastava, Vijay Kumar. (2007). Analysis of Cricket Skills. Sports Publication.
- Syal, Meenu. (2004). Teach Yourself Cricket. Prerna Prakashan.
- Tyagi, Arun Kumar. (2012). Cricket Skills and Rules. Khel Sahitya Kendra.
- Woolmer, Bob. (2009). The Art and Science of Cricket. Firefly Book Limited.

Course Code: MAPE-PC-305

Marks: (ESP=70+CCA=30) = 100

Course Title: Football-I

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I

Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.
- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Wade, A. (1967). The FA-guide to training and coaching. London: The Football Association.
- Csanádi, Á. (1972). Soccer: Technique-tactics-coaching. Corvina Press.
- Beswick, B. (2010). Focused for soccer (Vol. 9, p. 12). Champaign, IL: Human Kinetics.
- Bobby Moffat .(1985). The Basic Soccer Guide. Collier Books.
- Reilly, T. (2003). Motion analysis and physiological demands. Science and soccer, 2, 59-72.

Course Code: MAPE-PC-306

Marks: (ESP=70+CCA=30) = 100

Course Title: Handball-I

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.
- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Clanton, R. E., and Dwight, M. P. (1996). Team handball: Steps to success. Human Kinetics.
- Nikola Radicc and Mitjallc. (2013). Handball : from beginner to top player. Self-publishing N. RadicPublisher.
- Baha M. Hamil and James D. LaPoint (1994). Team Handball: Skills, Strategies and Training. EddieBowers Publishing Company.
- Bernath E. Phillips .(2013). Fundamental Handball. Literary Licensing publisher.

Course Code: MAPE-PC-307

Marks: (ESP=70+CCA=30) = 100

Course Title: Hockey-I

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.
- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Dilip K. Dureha and Akhil Mehrotra (2003). Teaching and Coaching Hockey. Janvani Prakashan (P) Ltd.
- Flint, R. H. (1976). Women's Hockey. Pelham Books.
- Taylor, I. C., and Vear, D. (1988). Taylor on Hockey. MacDonal, Queen Anne Press.
- Narang, P. (2003). Play and Learn Hockey. Pinnacle Technology.
- Singh. Gian and Wallia Kuku. (1979). Learn Hockey this way. Commercial Publication Bureau, New Delhi.
- Wein, H. (1979). The science of hockey. (D. Belchamber, Trans).

Course Code: MAPE-PC-308

Marks: (ESP=70+CCA=30) = 100

Course Title: Kabaddi-I

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.
- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Siddharth (2016). "Kabaddi Introduction, Rules, Information, History and Competitions". Sportycious. Retrieved 28 January 2020.
- Rules of Kabaddi". International Kabaddi Federation (IKF). Archived from the original on 4 March 2016. Retrieved 26 August 2014.
- S. Muniraju. (2015). A Text Book on Kabaddi: Kabaddi, Skills Techniques and Strategies. Lap Lambert Academic Publishing.
- E. Prasad Rao. (2002). Kabaddi- the complete hand book. Jagadamba Publications, Vizianagaram, A.P.

Course Code: MAPE-PC-309

Marks: (ESP=70+CCA=30) = 100

Course Title: Judo-I

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.
- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Hill, Robert. (2010). World of Martial Arts. 128 Valley Ln London, Kentucky: LuLu Publishing.
- Kashiwazaki, Katsuhiko. (1992). Shimewaza, Judo Masterclass Techniques. London: Ippon Books.
- Kashiwazaki, Katsuhiko. (1997). Osaekomi, Judo Masterclass Techniques. London: Ippon Books.
- Toshiro Daigo. (2016). Kodokan Judo Throwing Techniques. Kodansha International; Reprint edition.
- Steve Scott. (2019). The Judo Advantage. YMAA Publication Center.

Course Code: MAPE-PC-310

Marks: (ESP=70+CCA=30) = 100

Course Title: Table Tennis-I

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.
- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- International Table Tennis Federation Level 1 Coaching Manual, 2003.
- Bose, Tapan and Mukherjee, Bhawani. (2000). Table Tennis Training Manual. (Phulkian Press Pvt. Ltd., SAI, NSNIS, Patiala, India.
- Fairholm, David. (1985). The Pocket Guide to Table-Tennis Tactics. Bell and Hyman Denmark House 37/39, Queen Elizabeth Street, London.
- Hodges, L. (1993). Table tennis: steps to success. Human Kinetics 1.
- Sklorz, Martin. (1973). Table Tennis. John Blackburn Ltd.

Course Code: MAPE-PC-311

Marks: (ESP=70+CCA=30) = 100

Course Title: Volleyball-I

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.
- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Anthony C. Varghese and Lawrence V. (2009). Volleyball Player. Handbook Friends Publication, New Delhi.
- Dumphy Mary and Wilde Rad. (2000). Volleyball Today (2nd Edition). Fritz/Brett.
- Ranganathan P.P. (2003). Volleyball, A Guide to Playing and Coaching. Friends Publication, Delhi.
- Resser C. Jonathan and Bohr Roald. (2003). Volleyball. Blockwell.
- Sagar S.K. (2001). Play Better Volleyball. Sports Publication, Delhi.
- Soudhu S. Gurbaksh. (1982). Volleyball Basic and Advanced. Sports People, Chandigarh.
- American Sport Education Program. (2007). Coaching Youth Volleyball. Human Kinetics.
- Wise, M. (1999). Volleyball drills for champions. Human Kinetics.

Course Code: MAPE-PC-312

Marks: (ESP=70+CCA=30) = 100

Course Title: Wrestling-I

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I
Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.
- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Course Code: MAPE-PC-313
Course Title: Weight Lifting-I

Marks: (ESP=70+CCA=30) = 100

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to:

1. Explain the rules and regulations of the game.
2. Recognize the rules/laws of games and its implication in competition situations.
3. Explain the qualifying system of major national and international tournaments.
4. Understand the different stages of techniques and the evaluation of techniques.
5. Recognise the playing area marking and equipment requirements of specific games.

Unit-I
Foundation and Rules

- Historical development of the game/sports at national and international levels.
- Rules and regulations of games/sports and their latest amendments.
- Latest changes in rules/laws and their impact on the game.
- Qualifying system of major national and international tournaments.
- Fundamental skills of the game/sport.

Techniques and their Application

- Classification and analysis of skill/ technique.
- Identification of faults in skills, their causes and corrections.
- Types of exercises to develop and consolidate fundamental skills of the game/sport.
- Teaching stages of techniques.
- Evaluation of techniques.
- Recreational and lead-up activities.
- Warm-up and cooling down exercises for game/sports.
- Training methods and means for the development of game/sports specific motor abilities (strength, speed, endurance, flexibility and coordinative ability).

Suggested Readings:

- Hand Book of International Weight Lifting Federation. Published by the International WeightLifting Federation, Budapest – Hungry 2005-08.
- Singh Hardayal (1995). Science of Sports Training” D.V.S. Publication Giri Nagar, Kalki.
- Vella Mark (2007). Anatomy for Strength and Fitness Training: An Illustrated Guide to yourmuscles in Action, New Holland Publishers Ltd.
- Joe Kenn (2003). Coach's Strength Training. Coaches Choice Publisher .
- Mohamed F. El-Hewie (2006). Essentials of Weightlifting and Strength Training Hardcover. Shaymaa Publishing Corporation.
- Greg Everett (2016). Olympic Weightlifting: A Complete Guide for Athletes and Coaches. CatalystAthletics, LLC
- Bob Takano (2012). Weightlifting Programming: A Winning Coach's Guide. Catalyst Athletics,LLC

Course Code: MAPE-PC-314

Marks: ESP= 100

Course Title: Synopsis

L	T	P	Cr
0	0	6	3

Course Outcomes:

On completion of the course, the students shall be able to:

1. Identify research gaps on a selected research area.
2. Formulate objectives, different types of hypotheses and research questions.
3. Select appropriate approach and design for different research topics.
4. Prepare a research proposal on any emerging/relevant problem in physical education and sports.

Unit-I

Writing of Research Proposal

- Identification and selection of research problem.
- Review of related literature and identification of the gaps in research.
- Writing title of research problem.
- Formulation of objectives, hypotheses/ research questions.
- Writing rationale of study.
- Formulation of a suitable research design and approaches for the research proposal.
- Identification of appropriate tools for the research study.
- Writing of references in APA 7th edition format.

Suggested Readings:

- Best, J.W. (1999). Research in education. New Delhi: Prentice Hall of India Pvt. Ltd.
- Bogdan, R.C., and Biklen, S.K. (2014). Qualitative research for education: an introduction to theory and methods. New Delhi: PHI Learning Pvt. Ltd.
- Chandra, S.S., and Sharma, R.K. (2010). Research in education. New Delhi: Atlantic Publications.
- Guthrie, G.B. (2010). Basic research methods: An entry to social science research. New Delhi. Sage Publications India Pvt. Ltd.
- Kaul, L. (1984). Methodology of educational research. New Delhi: Vikas Publications.
- Kerlinger, F.N. (1986). Foundations of behavioural research. Fort Worth TX: Harcourt Bmce Jovanovich.
- Kumar, R. (2011). Research methodology. New Delhi: Sage Publications India Pvt. Ltd.
- Newby, P. (2014). Research methods for education. New York: Routledge Publications.
- Pathak, R. P. (2015). Methodology of educational research. New Delhi: Atlantic Publications.
- Richards, L., and Morse, J.M. (2013). Qualitative methods. U.S.A: Sage Publications, Inc.
- Wellington, J. (2015). Educational research. USA: Bloomsbury Academic Publications.

Suggested Websites:

- www.education.com
- www.academia.edu
- www.okstate.edu
- www.aect.org
- www.oxfordbibliographies.com
- www.academia.edu
- www.southalabama.edu

Course Code: MAPE-PC-315**Course Title: Teaching Practice-III****Marks: ESP=50**

L	T	P	Cr
0	0	6	3

Teaching Experience:

• The M.A. (Physical Education) 3rd Semester students need to develop proficiency in taking coaching lesson in selected game/sports discipline. In view of this, simulated teaching practice of 02 weeks will be conducted/organised in the university campus. In this simulated teaching practice, it would be compulsory for every student to undertake 10 supervised teaching lessons. Out of 10 lessons, four lessons (04) from track events, four lessons (04) from team games/sports and two lessons (02) of classroom teaching shall be taken by each student in playground/class itself. The Chairperson/or his/her nominee will certify that the candidate's notebook is complete in all aspects and candidate has fulfilled all essential requirements pertaining to teaching practice.

Ability Enhancement Course

Course Code: MAPE-AEC-301

Marks: ESP= 50

Course Title: Intramural Activities-III

L	T	P	Cr
0	0	2	1

Course Outcomes:

On completion of the course, the students shall be able to:

1. Acquire relevant skills in various Sports and Games.
2. Develop good judgment and fair play in competitions.
3. Enhance teamwork and leadership skills.
4. Develop social interaction/team cohesion among diverse demographic representations through play.
5. Imbibe organising proficiency in various sporting events.

Unit-I

- Introduction to intramural.
- Orientation and house distribution.
- Appointment of house bearers and house masters.
- Framing of rules and regulations of inauguration of intramural competitions.
- March past and placard display.
- Orientation of rules and regulations.
- Competition planning, organising, officiating, participating and overall management of jumping events, badminton, basketball, cricket, football, handball, hockey, kabaddi, judo, volleyball, table tennis, wrestling and weightlifting.

Semester-IV

Skill Enhancement Courses (Practical Courses)

Course Code: MAPE-PC-401

Marks: (ESP=70+CCA=30) = 100

Course Title: Steeple Chase and Combined Events

L	T	P	Cr
0	0	4	2

Course Outcomes:

On completion of the course, students shall be able to:

1. Mark the field of steeple chase and combined events with proper specifications.
2. Explain the rules and regulations of the steeple chase and combined events.
3. Learn fundamental skills and techniques for steeple chase and combined events.
4. Demonstrate proper form and technique while performing each event.
5. Perform officiating and conducting the steeple chase and combined events.
6. Identify the mechanical principles involved in skills and techniques of steeple chase and combined events.

Unit-I

- Historical development of events with special reference to India and the World.
- Important tournaments held at national and international levels.
- Rules and regulations and their latest amendment.
- Warming-up and cooling down exercises for various steeple chase and combined events.
- Fundamental skills and techniques of Steeple Chase.
- Techniques of combined events (triathlon, Pentathlon, hexathlon, heptathlon and decathlon)
- Drills and conditioning exercises for steeple chase and combined events.
- Marking of steeple chase and combined events.
- Technical rules and duties of officials in steeple chase and combined events.
- Officiating in steeple chase and combined events.
- World record in steeple chase and combined events.

Suggested Readings:

- Schneider, R. C. (2009). Ethics of Sport and Athletics: Theory, Issues, and Application. Wolters Kluwer Health/ Lippincott Williams and Wilkins.
- Zeigler, E. F., and Spaeth, M. J. (1975). Administrative Theory and Practice in Physical Education and Athletics.

Suggested Websites:

- <https://www.worldathletics.org/about-iaaf/documents/book-of-rules>
- <https://sportsauthorityofindia.nic.in/showimg.asp?ID=580>

Sports Specialization-II (Student can opt any one of the following courses)

Course Code: MAPE-PC-402

Marks: (ESP=70+CCA=30) = 100

Course Title: Badminton-II

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to

1. Explain the different stages of talent identification and development.
2. Develop insight for planning and periodization of sports.
3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the game.
4. Understand the qualities and qualifications of an official and their duties and responsibilities.
5. Develop proficiency in officiating and conducting the game at different level.
6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive
- Requisite of badminton player (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.
- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.
- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Readings:

- Downey, J. C., and Brodie, D. (1980). Get Fit for Badminton: A Practical Guide to Training for Players and Coaches. Pelham Books.
- Downey, Jake (1993). Winning Badminton Doubles How to coach Badminton. Published by Jake Downey.
- Downey, Jake (1982). Better Badminton for All. Pelham Books .
- Downey, Jake (1993). Excelling at Badminton (Beyond the Basics). Teach Yourself Books.
- Downey, Jake (2007). Tactics in Badminton Singles. e-book.
- Grice (2007). Badminton Steps to Success (2nd Edition). Human Kinetics.
- John Edwards (1997). Badminton: Technique, Tactics, Training (Crowood Sports Guides).The CrowoodPress Ltd.
- Mark Golds (2002). Badminton (Series - Skills of the Game), The Crowood Press Ltd.

Course Code: MAPE-PC-403

Marks: (ESP=70+CCA=30) = 100

Course Title: Basketball-II

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to

1. Explain the different stages of talent identification and development.
2. Develop insight for planning and periodization of sports.
3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the game.
4. Understand the qualities and qualifications of an official and their duties and responsibilities.
5. Develop proficiency in officiating and conducting the game at different level.
6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive
- Requisite of basketball player (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.
- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.
- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Reading:

- OBE, F. W. D. (2014). Sports Training Principles: An Introduction to Sports Science. Bloomsbury Publishing.
- Geyer, D. (1977). Full Court Control Basketball: A Flexible Offense to Exploit Opponents' Weaknesses. Parker Publishing Company.
- Allen, A. P. (1959). Handbook of Baseball Drills. Prentice-Hall.
- McGuire Frank. (1959). Defensive basketball. Prentice-Hall, Inc. New York.
- Kanika K. (2001). Basketball Coaching Manual. Sports Publication.
- Vaidhya and Rajesh. (2007). Skills and Tactics Basketball. Sports Publication. New Delhi.

Course Code: MAPE-PC-404
Course Title: Cricket-II

Marks: (ESP=70+CCA=30) = 100

Course Outcomes:

L	T	P	Cr
0	0	6	3

After completion of the course, the students shall be able to

1. Explain the different stages of talent identification and development.
2. Develop insight for planning and periodization of sports.
3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the game.
4. Understand the qualities and qualifications of an official and their duties and responsibilities.
5. Develop proficiency in officiating and conducting the game at different level.
6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive
- Requisite of cricket player (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.
- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.

- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Reading:

- Aneja, O.P. (2012). How to Play Cricket. Prerna Prakashan.
- Arora and Monika. (2005). Cricket Coaching Manual. Sports Publication.
- Bharadwaj and Arun. (2008). Coaching Batting Skills. Royal Colour Cartons.
- Boe, Clair and Norton (1959). Men to Men Defense and Attack. New York: Ronald Press Company.
- Kutty Suresh. (2003). Fielding Drills in Cricket. Sports Publication.
- Rachna. (2001). Play Better Cricket. Sports Publication.
- Srivastava, A.K. (2006). How to Coach Bowling. Sports Publication.
- Srivastava, Vijay Kumar. (2007). Analysis of Cricket Skills. Sports Publication.
- Syal, Meenu. (2004). Teach Yourself Cricket. Prerna Prakashan.
- Tyagi, Arun Kumar. (2012). Cricket Skills and Rules. Khel Sahitya Kendra.
- Woolmer, Bob. (2009). The Art and Science of Cricket. Firefly Book Limited.

Course Code: MAPE-PC-405

Marks: (ESP=70+CCA=30) = 100

Course Title: Football-II

Course Outcomes:

L	T	P	Cr
0	0	6	3

After completion of the course, the students shall be able to

1. Explain the different stages of talent identification and development.
2. Develop insight for planning and periodization of sports.
3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the game.
4. Understand the qualities and qualifications of an official and their duties and responsibilities.
5. Develop proficiency in officiating and conducting the game at different level.
6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive
- Requisite of football player (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.

- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.
- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Reading:

- Wade, A. (1967). The FA-guide to training and coaching. London: The Football Association.
- Csanádi, A. (1972). Soccer: Technique-tactics-coaching. Corvina Press.
- Beswick, B. (2010). Focused for soccer (Vol. 9, p. 12). Champaign, IL: Human Kinetics.
- Bobby Moffat .(1985). The Basic Soccer Guide. Collier Books.
- Reilly, T. (2003). Motion analysis and physiological demands. Science and soccer, 2, 59-72.

Course Code: MAPE-PC-406

Marks: (ESP=70+CCA=30) = 100

Course Title: Handball-II

Course Outcomes:

L	T	P	Cr
0	0	6	3

After completion of the course, the students shall be able to

1. Explain the different stages of talent identification and development.
2. Develop insight for planning and periodization of sports.
3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the game.
4. Understand the qualities and qualifications of an official and their duties and responsibilities.
5. Develop proficiency in officiating and conducting the game at different level.
6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive

- Requisite of handball player (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.
- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.
- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Reading:

- Clanton, R. E., and Dwight, M. P. (1996). Team handball: Steps to success. Human Kinetics.
- Nikola Radic and Mitja Ilc. (2013). Handball : from beginner to top player. Self-publishing N. Radic Publisher.
- Baha M. Hamil and James D. LaPoint (1994). Team Handball: Skills, Strategies and Training. Eddie Bowers Publishing Company.
- Bernath E. Phillips .(2013). Fundamental Handball. Literary Licensing publisher.

Course Code: MAPE-PC-407

Marks: (ESP=70+CCA=30) = 100

Course Title: Hockey-II

Course Outcomes:

L	T	P	Cr
0	0	6	3

- After completion of the course, the students shall be able to
1. Explain the different stages of talent identification and development.
 2. Develop insight for planning and periodization of sports.
 3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the game.
 4. Understand the qualities and qualifications of an official and their duties and responsibilities.
 5. Develop proficiency in officiating and conducting the game at different level.
 6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive
- Requisite of football player (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.
- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.
- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Reading:

- Dilip K. Dureha and Akhil Mehrotra (2003). Teaching and Coaching Hockey. Janvani Prakashan (P) Ltd.
- Flint, R. H. (1976). Women's Hockey. Pelham Books.
- Taylor, I. C., and Vear, D. (1988). Taylor on Hockey. MacDonal, Queen Anne Press.
- Narang, P. (2003). Play and Learn Hockey. Pinnacle Technology.
- Singh. Gian and Wallia Kuku. (1979). Learn Hockey this way. Commercial Publication Bureau, New Delhi.
- Wein, H. (1979). The science of hockey. (D. Belchamber, Trans).

Course Code: MAPE-PC-408

Marks: (ESP=70+CCA=30) = 100

Course Title: Kabaddi-II

L	T	P	Cr
0	0	6	3

Course Outcomes:

- After completion of the course, the students shall be able to
1. Explain the different stages of talent identification and development.
 2. Develop insight for planning and periodization of sports.
 3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the

game.

4. Understand the qualities and qualifications of an official and their duties and responsibilities.
5. Develop proficiency in officiating and conducting the game at different level.
6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive
- Requisite of kabaddi player (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.
- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.
- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Reading:

- S. Muniraju. (2015). A Text Book on Kabaddi: Kabaddi, Skills Techniques and Strategies. Lap Lambert Academic Publishing.
- E. Prasad Rao. (2002). Kabaddi- the complete hand book. Jagadamba Publications, Vizianagaram, A.P.

Course Code: MAPE-PC-409

Marks: (ESP=70+CCA=30) = 100

Course Title: Judo-II

L	T	P	Cr
0	0	6	3

Course Outcomes:

- After completion of the course, the students shall be able to
1. Explain the different stages of talent identification and development.
 2. Develop insight for planning and periodization of sports.

3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the game.
4. Understand the qualities and qualifications of an official and their duties and responsibilities.
5. Develop proficiency in officiating and conducting the game at different level.
6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive
- Requisite of judo player (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.
- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.
- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Reading:

- Hill, Robert. (2010). World of Martial Arts. 128 Valley Ln London, Kentucky: LuLu Publishing.
- Kashiwazaki, Katsuhiko. (1992). Shimewaza, Judo Masterclass Techniques. London: Ippon Books.
- Kashiwazaki, Katsuhiko. (1997). Osaekomi, Judo Masterclass Techniques. London: Ippon Books.
- Toshiro Daigo. (2016). Kodokan Judo Throwing Techniques. Kodansha International; Reprint edition.
- Steve Scott. (2019). The Judo Advantage. YMAA Publication Center.

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to

1. Explain the different stages of talent identification and development.
2. Develop insight for planning and periodization of sports.
3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the game.
4. Understand the qualities and qualifications of an official and their duties and responsibilities.
5. Develop proficiency in officiating and conducting the game at different level.
6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive
- Requisite of table tennis player (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.
- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.
- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Reading:

- Bose, Tapan and Mukherjee, Bhawani. (2000). Table Tennis Training Manual. (Phulkian Press Pvt. Ltd., SAI, NSNIS, Patiala, India.
- Fairholm, David. (1985). The Pocket Guide to Table-Tennis Tactics. Bell

- and Hyman Denmark House 37/39, Queen Elizabeth Street, London.
- Hodges, L. (1993). Table tennis: steps to success. Human Kinetics 1.
 - Sklorz, Martin. (1973). Table Tennis. John Blackburn Ltd.

Course Code: MAPE-PC-411

Marks: (ESP=70+CCA=30) = 100

Course Title: Volleyball-II

L	T	P	Cr
0	0	6	3

Course Outcomes:

- After completion of the course, the students shall be able to
1. Explain the different stages of talent identification and development.
 2. Develop insight for planning and periodization of sports.
 3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the game.
 4. Understand the qualities and qualifications of an official and their duties and responsibilities.
 5. Develop proficiency in officiating and conducting the game at different level.
 6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive
- Requisite of volleyball player (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.
- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.
- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Reading:

- Anthony C. Varghese and Lawrence V. (2009). Volleyball Player. Handbook Friends Publication, New Delhi.
- Dumphy Mary and Wilde Rad. (2000). Volleyball Today (2nd Edition). Fritz/Brett.
- Ranganathan P.P. (2003). Volleyball, A Guide to Playing and Coaching. Friends Publication, Delhi.
- Resser C. Jonathan and Bohr Roald. (2003). Volleyball. Blockwell.
- Sagar S.K. (2001). Play Better Volleyball. Sports Publication, Delhi.
- Soudhu S. Gurbaksh. (1982). Volleyball Basic and Advanced. Sports People, Chandigarh.
- American Sport Education Program. (2007). Coaching Youth Volleyball. Human Kinetics.
- Wise, M. (1999). Volleyball drills for champions. Human Kinetics.

Course Code: MAPE-PC-412

Marks: (ESP=70+CCA=30) = 100

Course Title: Wrestling-II

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to

1. Explain the different stages of talent identification and development.
2. Develop insight for planning and periodization of sports.
3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the game.
4. Understand the qualities and qualifications of an official and their duties and responsibilities.
5. Develop proficiency in officiating and conducting the game at different level.
6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive
- Requisite of wrestler (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.
- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.
- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Reading:

- Hand Book of International Weight Lifting Federation. Published by the International WeightLifting Federation, Budapest – Hungary 2005-08.
- Singh Hardayal (1995). Science of Sports Training” D.V.S. Publication Giri Nagar, Kalki.
- Vella Mark (2007). Anatomy for Strength and Fitness Training: An Illustrated Guide to yourmuscles in Action, New Holland Publishers Ltd.
- Joe Kenn (2003). Coach's Strength Training. Coaches Choice Publisher .
- Mohamed F. (2006).Essentials of Weightlifting andStrength Training Hardcover. Shaymaa Publishing Corporation.
- Greg Everett (2016). Olympic Weightlifting: A Complete Guide for Athletes and Coaches. CatalystAthletics, LLC
- Bob Takano (2012). Weightlifting Programming: A Winning Coach's Guide. Catalyst Athletics,LLC

Course Code: MAPE-PC-413

Marks: (ESP=70+CCA=30) = 100

Course Title: Weightlifting-II

L	T	P	Cr
0	0	6	3

Course Outcomes:

After completion of the course, the students shall be able to

1. Explain the different stages of talent identification and development.
2. Develop insight for planning and periodization of sports.
3. Understand the philosophy of coaching, tactical training, offensive and defensive skills of the game.
4. Understand the qualities and qualifications of an official and their duties and responsibilities.
5. Develop proficiency in officiating and conducting the game at different level.
6. Summarise physical and psychological preparation of athlete.

Unit-I

Tactics and their application

- Philosophy of coaching applied in game/sport
- Meaning, aims and objectives of technical and tactical training.
- Developing basic strategy: Offensive and defensive
- Requisite of weightlifter (physical, technical and psychological).
- Mechanical analysis of technical skills.
- Relationship between tactics and strategy.
- Team building (On and off court).

Officiating

- Play area dimensions and marking.
- Equipment required and their specifications.
- Qualities and qualifications of an official.
- Role of officials and their duties and responsibilities.
- Mechanics of officiating.
- Score sheet: use and interpretation.
- Organization of competition at state, national and international level.

Talent Identification and Development

- Detection and development of talent in game/sport.
- Planning and periodisation in game/sport.
- Basic concept of preparation of training schedule.
- Preparation of short-term and long-term training plans in game/sport.
- Periodisation in the training of players in game/sport.
- General/specific fitness tests and performance/skill test in game/sport.

Suggested Reading:

- Hand Book of International Weight Lifting Federation. Published by the International WeightLifting Federation, Budapest – Hungary 2005-08.
- Singh Hardayal (1995). Science of Sports Training” D.V.S. Publication Giri Nagar, Kalki.
- Vella Mark (2007). Anatomy for Strength and Fitness Training: An Illustrated Guide to yourmuscles in Action, New Holland Publishers Ltd.
- Joe Kenn (2003). Coach's Strength Training. Coaches Choice Publisher .
- Mohamed F. (2006).Essentials of Weightlifting andStrength Training Hardcover. Shaymaa Publishing Corporation.
- Greg Everett (2016). Olympic Weightlifting: A Complete Guide for Athletes and Coaches. CatalystAthletics, LLC
- Bob Takano (2012). Weightlifting Programming: A Winning Coach's Guide. Catalyst Athletics,LLC

Course Code: MAPE-PC-414

Marks: ESP = 100

Course Title: Dissertation

L	T	P	Cr
0	0	12	6

Course Outcomes:

On completion of the course, the students shall be able to:

1. Conduct research independently in physical education and sport.
2. Develop analytical and logical thinking in the process of conducting research.
3. Apply the implications of educational research in generating new knowledge.
4. Complete the research report as per prescribed format.

Research Work:

Students shall have dissertation work for M.P.Ed-IV Semester and synopsis for the same will be submitted in III semester. Candidate will give presentation for his/her research work before the research development committee; candidate will collect data and write all five chapters under the guidance and supervision of his allotted supervisor. A candidate must submit his/her dissertation not less than one week before the end of the IV Semester Examination. The candidate has to face the Viva-Voce conducted by external examiner.

Suggested Readings

- Best, J.W. (1999). Research in education. New Delhi: Prentice Hall of India Pvt. Ltd.
- Bogdan, R.C., and Biklen, S.K. (2014). Qualitative research for education: an introduction to theory and methods. New Delhi: PHI Learning Pvt. Ltd.
- Chandra, S.S., and Sharma, R.K. (2010). Research in education. New Delhi: Atlantic Publications.
- Guthrie, G.B. (2010). Basic research methods: An entry to social science research. New Delhi. Sage Publications India Pvt. Ltd.
- Kaul, L. (1984). Methodology of educational research. New Delhi: Vikas Publications.
- Kerlinger, F.N. (1986). Foundations of behavioural research. Fort Worth TX: Harcourt Bmce Jovanovich.
- Kumar, R. (2011). Research methodology. New Delhi: Sage Publications India Pvt. Ltd.
- Newby, P. (2014). Research methods for education. New York: Routledge Publications.
- Pathak, R. P. (2015). Methodology of educational research. New Delhi: Atlantic Publications.
- Richards, L., and Morse, J.M. (2013). Qualitative methods. U.S.A: Sage Publications, Inc.
- Wellington, J. (2015). Educational research. USA: Bloomsbury Academic Publications.

Suggested websites

- www.education.com
- www.academia.edu
- www.okstate.edu
- www.aect.org
- www.oxfordbibliographies.com
- www.academia.edu
- www.southalabama.edu

Course Code: MAPE-PC- 415

Course Title: School Internship

Marks: ESP = 100

L	T	P	Cr
0	0	8	4

Course Outcomes:

On completion of the course, the students shall be able to:

1. Critically analyze the administrative activities of teacher education institutions.
2. Learn and practice the process of sports activities assessment and intervention.
3. Promote student learning by providing responsive instructions.

4. Assess different aspects of children's learning without a focus only on achievement.

Unit-I

School Internship

- The M.A. (Physical Education) 4th Semester students need to complete an internship of 01 month in nearby school/colleges in Shimla city. It would play a crucial role in the professional development of students, and students will achieve valuable experience. It will also offer an opportunity to gain relevant experience and get a realistic perspective on physical education teaching.
- Internship is a compulsory program in a teacher education institution for the students acting as interns at identified physical education-related organisations focusing on bridging the gap between theory and practice through planned and structured tasks or projects designed in cooperation with the teacher education institute and host association or organisation. The programme should be considered as a mentored component whereby faculty from teacher education institution called as faculty mentor and a member from the host association or organisation known as field mentor would collectively guide groups of students.

Suggested Readings:

- Aniket Singh (2018). The Complete Book of Internships in India: Intern Abroad This Summer. 1st edition, Notion Press Publication.
- Judith B. Boettcher and Rita-Marie Conrad (2010). The Online Teaching Survival Guide. 1st edition, Jossey-Bass Publication.
- Waugh C. and Norman Grundland (2009). Assessment of Student Achievement. 10th edition, Pearson Publisher.
- Judith Grunert O'Brien, Barbara J. Millis, Margaret W. Cohen and Robert M. Diamond (2008). The Course Syllabus: A Learning-Centered Approach. 1st edition, Jossey-Bass Publisher.

Suggested Websites:

- <http://ed-web2.educ.msu.edu/team4/>
- <https://learning.colostate.edu/guides/guide.cfm?guideid=4&dbd=-6%23768%231280%231%23n> (Links to an external site.) Links to an external site.
- <https://studentconduct.usu.edu/studentcode/article6> (Links to an external site.) Links to an external site

Generic Elective Course

Course Code: MAPE-GEC-401

Marks: (ESE-70+CCA-30) = 100

Course Title: Yoga and Well Being

L	T	P	Cr
4	0	0	4

Course Outcomes:

On completion of the course, the students shall be able to:

1. Comprehend the basic principles and applications of Yoga.
2. Discuss the yogic concept of health, wellness and illness.
3. Demonstrate various types of asanas, pranayama and kriyas.

4. Understand the importance of yogic science and their role in health and wellness.
5. Analyse the yogic concept of holistic health and its importance in the management of diseases.

Unit-I **Introduction to Yoga**

- Origin of yoga & its brief historical development.
- Meaning, definition & importance of yoga.
- Aims and objectives of yoga education.
- Classification of Yoga: Raja yoga, bhakti yoga, karma yoga, mantra yoga, gyana yoga and hatha yoga.
- Yoga as a Science of Art (Yoga Philosophy).
- Meditation: meaning, techniques, principles and benefits of meditation.
- Application and misconception about yoga in modern society.

Unit-II **Shatkarma, Asanas, Pranayam, Mudras and Bandhas**

- Shatkarma: Meaning, definition, types, techniques, precautions and benefits.
- Asanas: Meaning, definition, types, techniques, precautions and benefits.
- Pranayama: Meaning, definition, types, techniques, precautions and benefits.
- Mudras: Meaning, definition, types, techniques, precautions and benefits.
- Bandhas: Meaning, definition, types, techniques, precautions and benefits.
- Suryanamaskar: Meaning, definition, suryanamaskar mantra and its meaning, technique, precautions and benefits.

Unit-III **Yoga and Well Being**

- Introductions to sensory organs (Eyes, Nose, Ears, Tongue and Skin).
- The yogic concept of health and wellness.
- Yogic concept of mental hygiene.
- Concept of Tridoshas, Sapt Dhatu, Agni, Vayu and Mala and their role in wellness.
- Concepts of Dinacharya and Ritucharya and their importance in wellbeing.
- Importance of Nidra and Brahmacharya in well-being.
- Role of yama and niyama for physical and mental well-being.
- Philosophy of the sacred syllable “Om” (AUM) for mental and physical wellbeing.

Unit-IV **Yoga for Common Health Problems**

- Yogic lifestyle for physical and mental wellbeing (ahara, vihar, achar, vichar).
- Mental relaxation through prayer - a cross-cultural approach to mental health.
- Yogic practices for the common health problems: constipation, diabetes, cervical, arthritis, backache, sciatica pain, indigestion, snoring, eye disorders and migraine.

- Effect of yoga on the different physiological systems: Glandular, circulatory, skeletal, digestive, nervous, respiratory, excretory and reproductive system.
- Concept of stress and yogic management of stress and its consequences.
- Yogic therapy and modern concept of yoga.
- Yogic Diet.

Suggested Readings:

- Kotecha.,and Vaidya Rajesh (2016). A Beginner's Guide to Ayurveda, Chakrapani Publications, Jaipur.
- Dr. R. S. Bhogal. Yoga Psychology. Kaivalyadhama Publication.
- Dr. Manmath., M. Gharote., and Dr. Vijay Kant. Therapeutic reference in Traditional Yoga texts.
- T.S. Rukmani. Patanjala Yoga Sutra.
- Sahay, G. S. (2013). Hatha Yoga Pradeepika. MDNIY Publication.