Semester-VII
Bachelor in Physical Education and Sports with Honours

DISCIPLINE SPECIFIC COURSE (DSC)- RESEARCH PROCESS IN PHYSICAL EDUCATION

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Research process in Physical Education	**4**	**0**	**0**	**0**	**Passed Class VI Sem**	**Nil**

Bachelor in Physical Education and Sports with Honours		
Programme: Bachelor in Physical Education and Sports with Honours	**Year: IV**	**Semester: VII** **Paper: DSC**
Subject: Physical Education		
Course: DSC	**Course Title:** Research Process in Physical Education	

Course Outcome:

- Students will understand the foundational principles of research, including hypothesis development, research design, data collection methods, and analysis techniques.
- Students will learn about ethical considerations in research, including informed consent, confidentiality, and integrity in data collection and reporting.
- Students will be able to select appropriate research designs (e.g., experimental, quasi-experimental, correlational) based on research questions and objectives.
- Students will learn various data collection methods (e.g., surveys, interviews, observations, experiments) and understand their strengths, limitations, and applicability to different research contexts.

Credits: 4	107	Discipline Specific Course
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	• Meaning and Definition of Research – Need, Nature and Scope of research in Physical Education. Classification of Research, Location of Research Problem, Criteria for selection of a problem, Qualities of a good researcher.	15
II	• Descriptive Methods of Research; Survey Study, Case study, Introduction of Historical Research, Steps in Historical Research, Sources of Historical Research: Primary Data and Secondary Data, Historical Criticism: Internal Criticism and External Criticism.	15
III	• Experimental Research – Meaning, Nature and Importance, Meaning of Variable, Types of Variables. Experimental Design - Single Group Design, Reverse Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design, Factorial Design.	15
IV	• Meaning and Definition of Sample and Population. Typesof Sampling; Probability Methods; Systematic Sampling, Cluster sampling, Stratified Sampling. Area Sampling – Multistage Sampling. Non- Probability Methods; Convenience Sample, Judgement Sampling, Quota Sampling. Chapterization of Thesis / Dissertation, Front Materials, Body of Thesis – Back materials. Method of Writing Research proposal, Thesis / Dissertation; Method of writingabstract and full paper for presenting in a conference and topublish in journals, Mechanics of writing Research Report, Footnote and Bibliography writing.	15

Recommended Readings

- Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc Clarke David.
- H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice Hall Inc. Craig Williams and Chris Wragg (2006)
- Data Analysis and Research forSport and Exercise Science, Londonl Routledge Press Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illonosis; Human Kinetics; Kamlesh,
- M.L. (1999) Reserach Methodology in Physical Education and Sports, New Delhi Moses, A.K. (1995) Thesis Writing Format, Chennai; Poompugar Pathippagam Rothstain,
- A (1985)Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc Subramanian, R, Thirumalai Kumar S & Arumugam C (2010)
- Research Methods in Health, Physical Education and Sports, New Delhi; Friends Publication Moorthy A. M. Research Processes in Physical Education (2010); Friend Publication, New Delhi

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-VII
Bachelor in Physical Education and Sports with Honours

DISCIPLINE SPECIFIC ELECTIVE (DSE)- Tests, Measurements and Evaluation in Physical Education

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Tests, Measurements and Evaluation in Physical Education	**4**	**0**	**0**	**0**	**Passed Class VI Sem**	**Nil**

BACHELOR IN PHYSICAL EDUCATION AND SPORTS WITH HONOURS		
Programme: Bachelor in Physical Education and Sports with Honours	**Year: IV**	**Semester: VII** **Paper: DSE**
Subject: Physical Education		
Course: DSE	**Course Title:** Tests, Measurements and Evaluation in Physical Education	

Course Outcome:

After completing this course, the students will be able to-

- Understand the advance concepts of Test & Measurement & Evaluation.
- Get equipped with the knowledge in depth about Criterion, and Administration of Test.
- Practical Experience of Physical Fitness, Motor Fitness and Sports Skill Tests.

Credits: 4	109	Discipline Specific Course
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	• Meaning and Definition of Test, Measurement and Evaluation. Need and Importance of Measurement and Evaluation. • Criteria for Test Selection–Scientific Authenticity. Meaning, definition a n d establishing V a l i d i t y, R e l i a b i l i t y , Objectivity. Norms – Administrative Considerations. • Physical Fitness Test: AAHPERD Health Related Fitness Battery (revised in 1984), ACSM Health Related Physical Fitness Test, Roger's physical fitness Index. Cardiovascular test; Harvard step test, 12 minutes run/walk test, Multi-stage fitness test (Beep test)	15
II	• Meaning and Definition of Motor Fitness. Test for Motor Fitness; Indiana Motor Fitness Test (For elementary and high school boys, girls and College Men) Oregon Motor Fitness Test • (Separately for boys and girls) –JCR test. Motor Ability; Barrow Motor Ability Test– Newton Motor Ability Test–Muscular Fitness–Kraus Weber Minimum Muscular Fitness Test.	15
III	• Physiological Testing: Aerobic Capacity: The Bruce Treadmill Test Protocol, 1.5 Mile Run test for college age males and females. • Anaerobic Capacity: Margaria-Kalamen test, Vertical Jump Anthropometric Measurements: Method of Measuring Height: Standing Height, Sitting Height. Method of measuring Circumference: Arm, Waist, Hip, Thigh. Method of Measuring Skinfolds: Triceps, Subscapular, Suprailiac.	15
IV	• Specific Spots Skill Test: Badminton: Miller Wal l Volley Test. Basketball: Johnson Basketball Test, Harrison Basketball Ability Test. Hockey: Friendel Field Hockey Test, Harban's Hockey Test, Volleyball, Russel Lange Volleyball Test, Brady Volleyball Test. Football: Johnson Soccer Test, McDonald Volley Soccer Test. Tennis: Dyer Tennis Test.	15

Recommended Readings

- Authors Guide(2013) ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications
- Collins, R.D. & Hodges P.B.(2001). A Comprehensive Guide to Sports Skills Tests and Measurement (2nd edition) Lanham:ScarecrowPress
- CuretonT.K. (1947) Physical Fitness AppraisalandGuidance, St.Louis:TheC.MosbyCompany
- GetchellB(1979)PhysicalFitnessAWayofLife,2nd EditionNewYork,JohnWileyand Sons,Inc
- Jenson,Clayne Rand Cyntha, C. Hirst(1980)MeasurementinPhysicalEducation and Athletics,NewYork,MacmillanPublisingCo.Inc
- KansalD.K.(1996),"TestandMeasurementinSportsandPhysicalEducation,NewDelhi: DVSPublications
- Krishnamurthy(2007)EvaluationinPhysicalEducationandSports,NewDelhi;AjayVer maPublication
- Vivian H. Heyward (2005) Advance Fitness Assessment and Exercise Prescription, rd 3 Edition,Dallas TX: The Cooper Institute for Aerobics Research
- Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports.New Delhi;Friends Publications

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-VII
Bachelor in Physical Education and Sports with Honours

DISCIPLINE SPECIFIC ELECTIVE (DSE)- TEACHING METHODOLOGY IN PHYSICAL EDUCATION

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Teaching Methodology in Physical Education	**4**	**0**	**0**	**0**	**Passed Class VI Sem**	**Nil**

BACHELOR IN PHYSICAL EDUCATION AND SPORTS WITH HONOURS		
Programme: Bachelor in Physical Education and Sports with Honours	**Year: IV**	**Semester: VII** **Paper: DSE**
Subject: Physical Education		
Course: DSE	**Course Title:** Teaching Methodology in Physical Education	

Course Outcome:

- Students will understand the theoretical principles of teaching and learning in physical education, including constructivism, behaviorism, and socio-cultural perspectives.
- Students will recognize different learning styles and preferences among students and adapt teaching methods to accommodate diverse learning needs.
- Students will learn to design developmentally appropriate physical education curricula aligned with national standards and educational goals.
- Students will learn to effectively demonstrate and model skills and techniques, providing clear visual examples for students to observe and emulate.

Credits: 4	111	Discipline Specific Electives
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	**(A) Meaning** Meaning of the term" teaching method" its scope and importance, The factors to be considered in determining the method ofteaching. **(B) Types of method** Part-whole method, whole part method, command method, discussion method, project method, demonstration method,imitation method, Principles of teaching	15
II	**Presentation Techniques** • Personal preparation, Technical preparation, Steps of presentation, Command and their techniques, Situation which require different words of command, Types of class management.	15
III	**Lesson planning** • Types of lesson planning: - General lesson plan, coachinglesson plan, Classroom teaching lesson plan, Objectives of different lesson plans and part of the lesson introductory and development, Skill practice/group work, Class activity/recreation part (reassembly revision anddismissal).	15
IV	**Organization and conduct of competitions** • Tracks and field, Gymnastics., Weight lifting, body building and best physique contest, Wrestling and combative games, Swimming, diving -aquatics, Games and sports tournaments.	15

Recommended Readings

- Tirunaryanan,c. and hariharan, s. methods in physical education,karai kudi south indiapress, 1962.
- Kozman, b. cassidy, rosalind and jakson,c.d.,methods in physical education, london: w.b. saunders company, 1960.
- Knapp, clyde and hagman, e.p. teaching methods foe physical education, new yoek: mcgraw hill book co., 1948

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-VII
Bachelor in Physical Education and Sports with Honours

DISCIPLINE SPECIFIC ELECTIVE (DSE)- Track Events and Marathons

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Track Events and Marathons	**4**	**0**	**0**	**4**	**Passed Class VI Sem**	**Nil**

BACHELOR IN PHYSICAL EDUCATION AND SPORTS WITH HONOURS		
Programme: Bachelor in Physical Education and Sports with Honours	**Year: IV**	**Semester: VII** **Paper: DSE**
Subject: Physical Education		
Course: DSE	**Course Title:** Track Events and Marathons	

Course Outcome:

- **Understanding the Fundamentals** – Gain in-depth knowledge of various track events, including sprints, middle-distance, long-distance races, and marathons, along with their historical and technical aspects.
- **Skill Development and Performance Enhancement** – Learn and apply correct sprinting, running, and finishing techniques, improving speed, endurance, and race strategies through scientific training methods.
- **Officiating and Event Management** – Develop the ability to officiate track events, understand race rules and regulations, and efficiently organize athletic meets and marathon races.
- **Application of Sports Science** – Apply principles of biomechanics, physiology, and nutrition to optimize performance, prevent injuries, and enhance recovery in track and marathon running.

Credits: 4	113	Discipline Specific Electives
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	• History and Evolution of Track Events • Classification of Track Events: Sprints, Middle Distance, and Long-Distance Races • Track Layout and Marking (100m, 200m, 400m, 800m, 1500m, 5000m, 10,000m) • Rules and Regulations (World Athletics and AFI Guidelines)	15
II	• Fundamentals of Sprinting Techniques (Acceleration, Stride Length, Frequency) • Block Starts and Finishing Techniques • Training Methods for Sprinting and Middle-Distance Events • Common Errors and Correction Strategies in Sprinting	15
III	• Physiological Demands of Long-Distance Running • Training Principles for Long-Distance and Marathon Runners • Energy Systems and Nutritional Needs for Endurance Athletes • Injury Prevention and Recovery Strategies	15
IV	• Race Strategies for Different Track Events • Officiating and Judging Procedures in Track Events • Conducting a Track Event: Planning and Organization • Role of Technology in Track and Marathon Races	15

Recommended Readings

- **Singh, Ajmer (2019).** *Essentials of Track and Field.* Khel Sahitya Kendra.
- **Kansal, D.K. (2008).** *A Textbook of Applied Measurement, Evaluation & Sports Training.* Sports & Spiritual Science Publications.
- **Sharma, V.K. (2015).** *Athletics and Track Events in India.* Sports Publication.
- **Mohan, V. (2018).** *Scientific Approach to Running and Marathon Training.* Sports Literature House.
- **Bisht, Dr. M.P. (2021).** *Advanced Training Methods for Athletics.* Khel Sahitya Kendra.
- **Jensen, C. R., & Fisher, A. G.** (2000). *Scientific Basis of Athletic Conditioning.* Lea & Febiger.
- **Hunter, J. S.** (2019). *The Science of Running: How to Find Your Limit and Train to Maximize Your Performance.* VeloPress.
- **Payton, C. & Bartlett, R.** (2008). *Biomechanical Evaluation of Movement in Sport and Exercise.* Routledge.
- **McArdle, W. D., Katch, F. I., & Katch, V. L.** (2014). *Exercise Physiology: Nutrition, Energy, and Human Performance.* Lippincott Williams & Wilkins.
- **IAAF (World Athletics).** (2020). *Coaching Manual for Track and Field Events.* World Athletics Publications.

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-VII

Bachelor of Physical Education and Sports with Honours

Academic Project

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course		Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial/Fieldwork/ Practical/Practice		
DISSERTATION	**6**			**Physical Education in Bachelor of Arts**	**Nil**

Bachelor in Physical Education and Sports with Honours		
Programme : Bachelor in Physical Education and Sports with Honours	**Year: IV**	**Semester: VII** **Paper: Dissertation**
Subject: Physical Education		
Course: Academic Project	**Course Title: Academic Project**	

Course Outcomes:

After studying this course, the students will be able to:

- Develop advanced research skills, including the ability to formulate research questions, design methodologies, gather and analyze data, and draw meaningful conclusions.
- Enhance their critical thinking abilities through the evaluation and synthesis of existing literature, identification of gaps in current knowledge, and the development of innovative approaches to their research topic.
- Demonstrate the ability to work independently, manage their time effectively, and take responsibility for their own learning and research process.
- Develop problem-solving skills by addressing challenges and obstacles encountered during the research process.
- Cultivate an understanding of ethical considerations in research, including issues related to plagiarism, and responsible conduct of research.

Credits: 6	**Dissertation**
Max. Marks: As per Univ. rules	**Min. Passing Marks: As per Univ. rules**

Unit	Topic	No. of
		Hours
Unit I	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	**90**

Recommended Readings

- Research Methods in Physical Activity" by Jerry R. Thomas, Jack K. Nelson, and Stephen J. Silverman
- *Essentials of Research Methods in Health, Physical Education, Exercise Science, and Recreation" by Kris E. Berg and Richard W. Latin*
- Qualitative Research in Physical Activity and the Health Professions" by William A. Pitney and Jenny Parker

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-VIII

Bachelor in Physical Education and Sports with Honours

DISCIPLINE SPECIFIC COURSE (DSC)- Yogic Science

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Yogic Science	4	4	0	0	Passed Class VII Sem	Nil

Bachelor in Physical Education and Sports with Honours		
Programme : Bachelor of Physical Education and Sports with Honours	**Year: IV**	**Semester: VIII** **Paper: DSC**
Subject: Physical Education		
Course: DSC	**Course Title:** Yogic Science	

Course Outcomes:

- Gain knowledge of the history, philosophy, and principles of Yoga as per ancient texts like Patanjali's Yoga Sutras, Bhagavad Gita, and Hatha Yoga Pradipika.
- Develop the ability to perform and instruct fundamental asanas, pranayama, meditation, and kriyas for physical and mental well-being.
- Understand the physiological, psychological, and therapeutic benefits of Yoga for stress management, rehabilitation, and overall health improvement.
- Apply yogic principles to enhance personal and professional life, promoting holistic wellness and a balanced lifestyle.

Credits: 4	**Discipline Specific Course**
Max. Marks: As per Univ. rules	**Min. Passing Marks: As per Univ. rules**

Unit	Topic	No. of Hours
Unit I	• Yogic Concept of Health: Meaning and definitions • Personal and Social Discipline through five Yamas (don'ts) and five Niyama (do's). • Alternative Therapy: Basic principles of Ayurveda, Naturopathy. • Therapeutic importance of Dincharya and Ritucarya, • Concept of Aahara, Vihara, Aacharan and Vichara	**15**
Unit II	• Significance of Yogasana & Pranayama • Basics of Therapeutic approaches of Hatha Yoga Practices given in different Hatha Yoga Texts (Hathapradipika, Gheranda Samhita, Shiva Samhita and Vasistha Samhita) • Intermediate and Advance Group of Asanas: Types , Techniques & Benefit, Pranayama, Nadi & Chakras: Types-Methods and benefits. • Knowledge of vital parameters to assess general state: Measurement of Blood • Pressure, Respiratory Rate, Pulse Rate and Body Temperature	**15**
Unit III	• Musculo-Skeletal Disorders • Respiratory Disorders • Cardiovascular Disorders • Endocrine & Metabolic Disorders: • Psychological and Psychiatric Disorder	**15**
Unit IV	• Concept of diet in Traditional Yogic Texts • Types of diet in Traditional Yogic Text □ Role of Yogic diet in health and disease. • Preparation of Therapeutic charts • Assessment of Nutritional status	**15**

Recommended Readings

- Bhogal, R. S :: Yoga & Mental Health and beyond, ACE Enterprises, Madhu Rajnagar, Pune Road, Pune, 2010
- Brahmachari Swami Dhirendra : Yogic Suksma Vyayama, Dhirendra Yoga Publications, New Delhi
- Coulter, H. D. (2012). Anatomy of Hatha Yoga: a manual for students, teachers, and practitioners. Body and Breath.
- George Feuerstein, (1975). Text Book of Yoga. London: Motilal Bansaridass Publishers (P) Ltd.
- Gharote, M.L. : Teaching Methods for Yogic practices, Kaivalyadhama Ashram, Lonavla
- Gore, (1990), Anatomy and Physiology of Yogac Practices. Lonavata: Kanchan Prkashan. Helen Purperhart (2004), The Yoga Adventure for Children. Netherlands: A Hunter House book.
- Iyengar, B. K. S. : Light on Yoga, Harper Collins Publisher, New Delhi, 2005
- Iyengar, B.K.S : Yoga Shastra (Vol-I & II) Ramamani Iyenger Memorial Yoga, Institute, Pune YOG, Mumbai

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-VIII

Bachelor of Physical Education and Sports with Honours

DISCIPLINE SPECIFIC ELECTIVES (DSE)- STATISTICS IN PHYSICAL EDUCATION & SPORTS

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Statistics in Physical Education & Sports	**4**	**4**	**0**	**0**	**Pass Sem VII**	**Nil**

Bachelor in Physical Education and Sports with Honours		
Programme : Bachelor in Physical Education and Sports with Honours	**Year: IV**	**Semester: VIII Paper DSE**
Subject: Physical Education		
Course: DSE	**Course Title:** Statistics in Physical Education & Sports	

Course Outcomes:

- Students will understand basic statistical concepts, including mean, median, mode, variance, standard deviation, and distribution types, and their relevance in physical education and sports contexts.
- Students will grasp the fundamental principles of probability theory and its applications in predicting outcomes in sports and physical education scenarios.
- Students will learn various methods for collecting data in physical education and sports settings, including surveys, observational methods, and experimental designs.
- Students will use descriptive statistics to summarize and describe data, providing a clear overview of key metrics and trends in physical education and sports research.
- Students will understand different research designs, including experimental, quasi-experimental, and non-experimental designs, and their appropriate use in physical education and sports research.

Credits: 4	**Discipline Specific Elective**

Max. Marks: As per univ. rules	Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	• Meaning and Definition of Statistics.,Function, need andimportance of Statistics. Types of Statistics. Meaning ofthe terms, Population, Sample, Data, types of data. Variables; Discrete, Continuous. Parametric and non- parametric statistics.	**15**
Unit II	• Data Classification, Tabulation and Measures of Central Tendency Meaning, uses and construction of frequency table.	**15**
Unit III	• Measures of Dispersions and Scales Meaning, Purpose, Calculation and advances of Range, Quartile, Deviation, Mean Deviation, Standard Deviation	**15**
Unit IV	• Probability Distributions and Graphs Normal Curve. Meaning of probability- Principles of normal curve – Properties of normal curve. Divergence form normality –Skewness and Kurtosis. Statistics Tests of significance; Independent"t" test, Dependent "t" test – chi – square test. level of confidence and interpretation of data. Meaning ofcorrelation – co-efficient of correlation.	**15**

Recommended Readings

- Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc Clark D.H. (1999)
- Research Problem in Physical Education 2nd edition, Eaglewood Cliffs, Prentice Hall, Inc.Jerry R Thomas & Jack K Nelson (2000)
- Research Methods in Physical Activities; Illonosis; Human Kinetics; Kamlesh, M. L. (1999)
- Reserach Methodology in Physical Education and Sports, New Delhi Rothstain A (1985)
- Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc Sivaramakrishnan. S. (2006)
- Statistics for Physical Education, Delhi; Friends Publication Thirumalaisamy (1998), Statistics in Physical Education, Karaikudi, Senthilkumar Publications.

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-VIII

Bachelor of Physical Education and Sports with Honours

DISCIPLINE SPECIFIC ELECTIVES (DSE)- Athletic Care & Rehabilitation

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the Course (if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Athletic Care & Rehabilitation	**4**	**4**	**0**	**0**	**Pass Sem VII**	**Nil**

Bachelor in Physical Education and Sports with Honours		
Programme : Bachelor in Physical Education and Sports with Honours	**Year: IV**	**Semester: VIII Paper DSE**
Subject: Physical Education		
Course: DSE	**Course Title:** Athletic Care & Rehabilitation	

Course Outcomes:

- The student will gain practical as well as theoretical knowledge about care of athletes.
- The student will gain knowledge and practical about therapeutic modalities which helps in rehabilitation process.
- The student will learn about different types of corrective exercises for the athletes rehabilitation.

Credits: 4	**Discipline Specific Elective**
Max. Marks: As per univ. rules	**Min. Passing Marks: As per Univ. rules**

Unit	Topic	No. of Hours
Unit I	• Definition and objectives of corrective physical Education.	**15**

	• Posture and body mechanics, Standards of Standing Posture. • Value of good posture, Drawbacks and causes of bad posture. Posture test – Examination of the spine.	
Unit II	• Normal curve of the spine and its utility, Deviations in posture: Kyphosis, lordosis, flat back, Scoliosis, round shoulders, • Knock Knee, Bow leg, Flat foot. • Causes for deviations and treatment including exercises. • Passive, Active, Assisted, Resisted exercise for Rehabilitation, Stretching, PNF techniques and principles.	**15**
Unit III	• Brief history of massage – Massage as an aid for relaxation – Points to be considered in giving massage – Physiological , Chemical, Psychological effects of massage–Indication/Contraindication of Massage • Classification of the manipulation used massage and their specific uses in the human body – Stroking manipulation: Effleurage-Pressure manipulation: Petrissage Kneading (Finger, Kneading, Circular) ironing Skin Rolling – Percussion manipulation: Tapotement, Hacking, Clapping, Beating, Pounding, Slapping, Cupping, Poking, Shaking Manipulation, Deep massage.	**15**
Unit IV	• Principles pertaining to the prevention of Sports injuries – care and treatment of exposed and unexposed injuries in sports – Principles of apply cold and heat, infrared rays – Ultrasonic, Therapy – Short wave diathermy therapy. Principles and techniques of Strapping and Bandages, Contrast Bath, Paraffin Bath.	**15**

Recommended Readings

- Dohenty. J. Meno.Wetb, Moder D (2000) Track & Field, Englewood Cliffs, Prentice Hal Inc. Lace, M. V. (1951) Massage and Medical Gymnastics, London: J & A Churchill Ltd.
- Mc Ooyand Young (1954) Tests and Measurement, New York: Appleton Century.
- Naro, C. L. (1967) Manual of Massage and, Movement, London: Febra and Febra Ltd.
- Rathbome, J.l. (1965) Corrective Physical education, London: W.B. Saunders & Co.
- Stafford and Kelly, (1968) Preventive and Corrective Physical Education, New York.

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-VIII
Bachelor in Physical Education and Sports with Honours

DISCIPLINE SPECIFIC ELECTIVE (DSE)- Athletics Field and Combined Events

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Athletics Field and Combined Events	**4**	**0**	**0**	**4**	**Pass Sem VII**	**Nil**

BACHELOR IN PHYSICAL EDUCATION AND SPORTS WITH HONOURS		
Programme: Bachelor in Physical Education and Sports with Honours	**Year: IV**	**Semester: VIII** **Paper: DSE**
Subject: Physical Education		
Course: DSE	**Course Title:** Athletics Field and Combined Events	

Course Outcome:

- **Understanding the Fundamentals** – Gain in-depth knowledge of various track events, including sprints, middle-distance, long-distance races, and marathons, along with their historical and technical aspects.
- **Skill Development and Performance Enhancement** – Learn and apply correct sprinting, running, and finishing techniques, improving speed, endurance, and race strategies through scientific training methods.
- **Officiating and Event Management** – Develop the ability to officiate track events, understand race rules and regulations, and efficiently organize athletic meets and marathon races.
- **Application of Sports Science** – Apply principles of biomechanics, physiology, and nutrition to optimize performance, prevent injuries, and enhance recovery in track and marathon running.

Credits: 4	123	Discipline Specific Electives
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	• History and Evolution of field Events • Classification of Field Events: Jumping and Throwing • Fundamental Techniques and Skills Required • Equipment and Facilities for Field Events • Safety Measures and Injury Prevention	15
II	• **Long Jump**: Phases (Approach, Take-off, Flight, Landing) and Techniques • **High Jump**: Scissors, Straddle, and Fosbury Flop Techniques • **Triple Jump**: Phases (Hop, Step, and Jump) and Execution • **Pole Vault**: Equipment, Techniques, and Training Methods	15
III	• **Shot Put**: Glide and Rotational Techniques • **Discus Throw**: Grip, Stance, and Rotational Technique • **Javelin Throw**: Grip, Approach, and Release Technique • **Hammer Throw**: Swinging, Turning, and Release Techniques • Strength Training and Conditioning for Throwers	15
IV	• **Decathlon (Men)**: Overview of 10 Events and Training Strategies • **Heptathlon (Women)**: Overview of 7 Events and Performance Optimization • Scoring System and Point Calculation in Combined Events • Psychological Preparation and Competition Strategies	15

Recommended Readings

- **Singh, Ajmer (2019).** *Essentials of Track and Field.* Khel Sahitya Kendra.
- **Kansal, D.K. (2008).** *A Textbook of Applied Measurement, Evaluation & Sports Training.* Sports & Spiritual Science Publications.
- **Sharma, V.K. (2015).** *Athletics and Track Events in India.* Sports Publication.
- **Mohan, V. (2018).** *Scientific Approach to Running and Marathon Training.* Sports Literature House.
- **Bisht, Dr. M.P. (2021).** *Advanced Training Methods for Athletics.* Khel Sahitya Kendra.
- **Jensen, C. R., & Fisher, A. G.** (2000). *Scientific Basis of Athletic Conditioning.* Lea & Febiger.
- **Hunter, J. S.** (2019). *The Science of Running: How to Find Your Limit and Train to Maximize Your Performance.* VeloPress.
- **Payton, C. & Bartlett, R.** (2008). *Biomechanical Evaluation of Movement in Sport and Exercise.* Routledge.
- **McArdle, W. D., Katch, F. I., & Katch, V. L.** (2014). *Exercise Physiology: Nutrition, Energy, and Human Performance.* Lippincott Williams & Wilkins.
- **IAAF (World Athletics).** (2020). *Coaching Manual for Track and Field Events.* World Athletics Publications.

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-VIII

Bachelor in Physical Education and Sports with Honours

DISSERTATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course		Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial/Fieldwork/ Practical/Practice		
DISSERTATION	**6**			**Pass Sem VII**	**Nil**

Bachelor in Physical Education and Sports with Honours		
Programme : Bachelor in Physical Education and Sports with Honours	**Year: IV**	**Semester: VIII** **Paper: Dissertation**
Subject: Physical Education		
Course: DISSERTATION	**Course Title: Dissertation**	

Course Outcomes:

After studying this course, the students will be able to:

- Develop advanced research skills, including the ability to formulate research questions, design methodologies, gather and analyze data, and draw meaningful conclusions.
- Enhance their critical thinking abilities through the evaluation and synthesis of existing literature, identification of gaps in current knowledge, and the development of innovative approaches to their research topic.
- Demonstrate the ability to work independently, manage their time effectively, and take responsibility for their own learning and research process.
- Develop problem-solving skills by addressing challenges and obstacles encountered during the research process.
- Cultivate an understanding of ethical considerations in research, including issues related to plagiarism, and responsible conduct of research.

Credits: 6	**Dissertation**
Max. Marks: As per Univ. rules	**Min. Passing Marks: As per Univ. rules**

Unit	Topic	No. of

		Hours
Unit I	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	

Recommended Readings

- Research Methods in Physical Activity" by Jerry R. Thomas, Jack K. Nelson, and Stephen J. Silverman
- *Essentials of Research Methods in Health, Physical Education, Exercise Science, and Recreation" by Kris E. Berg and Richard W. Latin*
- Qualitative Research in Physical Activity and the Health Professions" by William A. Pitney and Jenny Parker

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-IX

Master in Physical Education and Sports

DISCIPLINE SPECIFIC COURSE (DSC)- Scientific Principles of Sports Training

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the Course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Scientific Principles of Sports Training	**4**	**4**	**0**	**0**	**Pass Sem VIII**	**Nil**

Master in Physical Education and Sports		
Programme : Master in Physical Education and Sports	**Year: V**	**Semester: IX** **Paper: DSC**
Subject: Physical Education		
Course: DSC	**Course Title:** Scientific Principles of Sports Training	
Course Outcomes: • Get skilled for training of all the performance factors following scientific methodology. • Get skilled about formulating training plan. • Develop ability to handle sports teams of different games in training as well as in competition.		
Credits: 4		**Discipline Specific Course**
Max. Marks: As per Univ. rules		**Min. Passing Marks: As per Univ. rules**

Unit	Topic	No. of Hours
Unit I	• Sports Training: Definition – Aim and Objectives, Characteristics, Principles of Sports Training, Training Means and its types • Load: Definition, Features of Training Load, Principles of Load, Judgement of Load, Adoption Process and Condition of Adoption, Super Compensation, Overload – Causes and Symptoms, Tackling of Overload	**15**
Unit II	• Strength: Forms and Characteristics of Strength, Factors Determining Strength, Means, Methods and Principles of Strength training, Strength training for Women and Children. • Speed: Forms and Characteristics of Speed, Factors Determining Speed, Means, Methods and Principles of Speed training. • Endurance: Forms and Characteristics of Endurance, Factors Determining Endurance, Means, Methods and Principles of Endurance training. • Flexibility: Forms and Characteristics of Flexibility, Factors Determining Flexibility, Means, Methods and Principles of Flexibility training. • Coordinative Abilities: Characteristics, Classification and Importance of Coordinative abilities, Training Means and Methods.	**15**
Unit III	• Technique: Definition of Technique, Skill and Style, Aim of Technique, Rational Technique, Characteristics of Technique, Motor learning and different Phases of skill acquisition, Interference and transfer in motor learning, Methods of technique training, causes and correction of faults. • Tactics: Definition of tactics and strategy, Basic Tactical concepts – Offensive, Defensive and High Performance, Methods of Tactical Training, Control of tactical knowledge.	**15**
Unit IV	• Planning: Meaning, Importance and Principles of Planning, Systems of Planning, Types of Training Plans, Top Form, Periodisation and its types, Contents for various periods of training and formulation of training plan, Training Session and its structure. Preparation of training plan. • Competition Planning and Preparation: Importance of competitions, Competition frequency, Types of Competitions, Main and Build-up Competitions, Direct Preparation for an important competition, Psychological preparation of sportsman for competition, preparation of competition plan. • Doping: Definition, Classes and Methods of Doping, Side effects of drugs, IOC List of drugs, Dope testing programs and procedures, Blood Doping	**15**

Recommended Readings

- Beotra Alka, Drug Education Handbook on Drug Abuse in Sports (Delhi: Sports Authority of India, 2000)
- Bompa T. O. & Buzzichelli C. A. Periodization: Theory and Methodology of Training. Sixth Edition. Human Kinetics Publication, USA.
- Bunn, J.W: Scientific Principles of Coaching.
- Cart, E. Klafs & Daniel, D. Arnheim, Modern Principles of Athletic Training, (St.Louis C.V. Mosphy Company, 1999)
- Cratty, J. Brayant Perceptual and Motor Development in Infants and Children (N.J.: Englewood Cliffs, Prentice Hall, Inc. 1979).
- David, R. Mottram, Drugs in Sports, (School of Pharmacy, Liverpool: John Moore University, 1996)
- Dick W. Frank. Sports Training Principles (London: Lepus Books, 1980).
- Haff G. G., & Triplett N. T. Essentials of Strength and Conditioning, 4th Edition, Human Kinetics Publication, USA.
- Harre, Dietrich, Principles of Sports Training (Berlin: Sporulated, 1982).
- Jensen, R. Clayne, a nd Fi s h e r A. G . Scientific Ba sis of A t h l e t i c nd conditioning(Philadelphia: Lea and Fibiger 1979), 2 Edn.
- Laursen P. & Buchheit M. Science and Applications of High-Intensity Interval Training. Human Kinetcs Publications, USA
- Matvyew, L.P. Fundamental of sports Training (Moscow: Progress Publishers, 1981).
- Morechouse and Rash: Scientific Basis of Athletic-Training.
- Schmidt R. A. & Lee T. D. Motor Learning and Performance (from Principles of Adaptation) Sixth Edition, Human Kinetics Publication, USA.
- Singh, H. Sports Training, General Theory and methods (Patiala: NSNIS, 1984).

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-IX
Master in Physical Education and Sports

DISCIPLINE SPECIFIC ELECTIVE (DSE)- Sports Medicine

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Sports Medicine	**4**	**4**	**0**	**0**	**Pass Sem VIII**	**Nil**

Master in Physical Education and Sports		
Programme: Master in Physical Education and Sports	**Year: V**	**Semester: IX** **Paper: DSE**
Subject: Physical Education		
Course: DSE	**Course Title:** Sports Medicine	

Course Outcome:

- Learn and gain knowledge about sports medicine.
- Gain knowledge about various types of sports injuries.
- Gain practical knowledge about sports injuries rehabilitation.
- Learn about use of first aid.

Credits: 4	Discipline Specific Electives
Max. Marks: As per Univ. rules	Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	• Meaning, definition and importance of Sports Medicine, Definition and Principles of therapeutic exercises. • Coordination exercise, Balance training exercise, Strengthening exercise, Mobilization exercise, Gait training, Gym ball exercise • Injuries: acute, sub-acute, and chronic, advantages and disadvantages of PRICE, PRINCE therapy, Aquatic therapy.	15
II	• Basic Rehabilitation: Strapping/Tapping: Definition, Principles Precautions Contraindications. • Proprioceptive neuromuscular facilitation: Definition hold, relax, repeated contractions. Show reversal technique exercises. • Isotonic, Isokinetic, isometric stretching. Definition. Types of stretching, Advantages, dangers of stretching, Manual muscle grading.	15
III	• Head, Neck and Spine injuries: Causes, Presentational of Spinal anomalies, Flexion, Compression, Hyperextension, Rotation injuries. • Spinal range of motion. Free hand exercises, stretching and strengthening exercise for head neck, spine. • Supporting and aiding techniques and equipment for Head, Neck and Spine injuries.	15
IV	• Upper Limb and Thorax Injuries: Shoulder: Sprain, Strain, Dislocation, and Strapping. Elbow: Sprain, Strain, Strapping. Wrist and Fingers: Sprain Strain, Strapping. Thorax, Rib fracture. • Breathing exercises, Relaxation techniques, Free hand exercise, Stretching and strengthening exercise for shoulder, Elbow, Wrist and Hand. Supporting and aiding techniques and equipment for Upper Limb and Thorax Injuries. • Lower Limb and Abdomen Injuries: Hip: Adductor strain, Dislocation, Strapping. Knee: Sprain, Strain, Strain, Strapping. Ankle: Sprain, Strain, Strapping. Abdomen: Abdominal wall, Contusion, Abdominal muscle strain. • Free exercises – Stretching and strengthening exercise for Hip, knee, ankle and Foot. Supporting and aiding techniques and equipment for Lower limb and Abdomen injures.	15

Recommended Readings

- Christopher M. Norris. (1993). Sports Injures Diagnosis and Management for Physiotherapists. East Kilbride: Thomson Litho Ltd.
- James, A.Gould & George J.Davies. (1985) Physical Therapy. Toronto: C.V. Mosby Company.
- Morris B. Million (1984) Sports Injuries and Athletic Problem. New Delhi: Surjeet Publication
- Pande. (1998). Sports Medicine. New delhi: Khel Shitya Kendra
- The Encyclopedia of Sports Medicine. (1998). the Olympic Book of Sports Medicine,
- Brukner, P. (2012). Brukner & Khan's clinical sports medicine. North Ryde: McGraw-Hill.Australia
- Haupt, H. A. (2001). Upper extremity injuries associated with strength training. Clinics in sports medicine, 20(3), 481-490.

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities.

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-IX
Masters in Physical Education and Sports

DISCIPLINE SPECIFIC ELECTIVE (DSE)- Physiology of Exercise

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Physiology of Exercise	**4**	**4**	**0**	**0**	**Pass Sem VIII**	**Nil**

MASTERS IN PHYSICAL EDUCATION AND SPORTS		
Programme: Masters in Physical Education and Sports	**Year: V**	**Semester: IX** **Paper: DSE**
Subject: Physical Education		
Course: DSC	**Course Title:** Physiology of Exercise	

Course Outcome:

- Understand the meaning and importance of exercise physiology.
- Learn the basic terminology of bioenergetics and metabolism related to exercise and training.
- Understand the mechanism of muscle contraction
- Have knowledge about the neural control of muscular activity
- Understand and identify the physiological response of exercise on different body system.
- Get an insight into the influence of environment factors on performance
- Concept of sports nutrition and obesity

Credits: 4	132	Discipline Specific Electives
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	• Definition of Physiology and Exercise Physiology • Need and importance of Exercise Physiology in the field of Physical Education and sports. • Scope of Exercise Physiology	15
II	• Energy production, structure and function of ATP. • Meaning and concept of Aerobic and Anaerobic Energy Metabolism. • Chemical composition of skeletal muscle, Microscopic structure of skeletal muscles, muscle fiber types • Sliding filament theory of Muscle contraction.	15
III	• Work capacity under different environmental conditions (Hot, Humid, Cold and High Altitude). • Effect of exercise/trainng on various systems of body: Cardio-respiratory, muscular and thermo-regulatory systems • Oxygen Debt, Second Wind.	15
IV	• Basic concept of a balanced diet, appropriate diet before, during and after athletic performance. • Ergogenic aids and Doping in sports • Definition of obesity, measurement of body fat by various methods, Body weight control.	15

Recommended Readings

- Benson, R., & Connolly, D. (2011). Heart rate Training. USA: Human Kinetics.
- Beotra Alka, (2000) Drug Education Handbook on Drug Abuse in Sports: Sports Authority of India Delhi.
- Bowers, R. W., Foss, M. M., & Fox, E. (1998). Physiological basis of Exercise and Sports(6th ed.). USA: McGraw-Hill Publisher.
- Burke, E. R. (1998). Precision Heart rate Training. USA: Human Kinetics
- Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
- Cheung, S. S. (2010). Advanced Environmental Exercise Physiology. USA: Human Kinetics.
- David, L Costill. (2004). Physiology of Sports and Exercise. USA: Human Kinetics.
- Fox, E.L., and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.
- Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co. Richard
- Plowman, A. S., & Smith, L. D. (2017). Exercise Physiology(5th ed.). USA: Woltars Kluwer.
- Plowman, A. S., & Smith, L. D. (2017). Exercise Physiology for Health, Fitness and Performance(5th ed.). USA: Wolters Kluwer.
- Porcari, J., Bryant, C., & Comana, F. (2015). Exercise Physiology. USA: F A Davis.

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-IX
Masters in Physical Education and Sports

DISCIPLINE SPECIFIC ELECTIVE (DSE)- Sports Specialization – I

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Sports Specialization – I (Skill Proficiency) Athletics/Badminton/ Basketball/Cricket/ Football/Gymnastics/ Handball/Hockey/ Kabaddi &Kho-Kho/Lawn Tennis/ Volleyball/Yoga (Any One)	**4**	**0**	**0**	**4**	**Pass Sem VIII**	**Nil**

MASTERS IN PHYSICAL EDUCATION AND SPORTS

Programme: Masters in Physical Education and Sports	**Year: V**	**Semester: IX** **Paper: DSE**
Subject: Physical Education		
Course: DSC	**Course Title:** Sports Specialization – I (Skill Proficiency) Athletics/Badminton/Basketball/Cricket/ Football/Gymnastics/Handball/Hockey/ Kabaddi &Kho-Kho/Lawn Tennis/ Volleyball/Yoga (Any One)	

Course Outcome:

- Demonstrate mastery in fundamental and advanced techniques of the chosen sport.
- Apply biomechanical principles to enhance performance and minimize injury risks.
- Exhibit a comprehensive understanding of the official rules and regulations.
- Officiate competitions effectively and make fair judgments based on game situations.
- Design structured training plans focusing on skill development, fitness, and tactical strategies.
- Utilize periodization principles to enhance athlete performance in a competitive setting.

Credits: 4	134	Discipline Specific Electives
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	• Introduction and Historical Development of games with special reference to India. • Important Tournaments held at National and International Levels. • National sports Awardees related to the game.	15
II	• Organizational set-up at national and International level (governing Bodies) • Measurement and Markings of concern game. • Facilities and Equipment of games.	15
III	• Training and development of fundamental skill and techniques of the game. • Training and development of advance techniques of the game. □ Implementation of drills for the technical Training.	15
IV	• Strategy and tactics of the game • Training and development of Basic tactics. • Training and development of Advance Tactics. • Rules and their interpretation of concern game. • Duties and responsibilities of the Technical Officials. • Training / coaching Lesson plan of the game.	15

Recommended Readings

- **Khan, E. A.** (2016). *Modern Coaching in Sports*. Sports Publications, New Delhi.
- **Sharma, V. M.** (2018). *Scientific Principles of Sports Training*. Friends Publications, India.
- **Sodhi, H. S.** (2005). *Sports Biomechanics and Kinesiology*. Anmol Publications, New Delhi.
- **Kamlesh, M. L.** (2019). *Physical Education: Facts and Foundations*. Khel Sahitya Kendra, New Delhi.
- **Singh, H.** (2012). *Science of Sports Training*. DVS Publications, India.
- **Shekar, K. C.** (2015). *Theory and Practice of Sports Coaching*. Sports Publications, India.
- **Satyanarayana, L.** (2014). *Athletic Training and Conditioning*. Khel Sahitya Kendra, New Delhi.
- **Bompa, T. O., & Haff, G. G.** (2018). *Periodization: Theory and Methodology of Training*. Human Kinetics, USA.
- **Schmidt, R. A., & Wrisberg, C. A.** (2008). *Motor Learning and Performance: A Situation-Based Learning Approach*. Human Kinetics, USA.
- **Wilmore, J. H., Costill, D. L., & Kenney, W. L.** (2021). *Physiology of Sport and Exercise*. Human Kinetics, USA.
- **Baechle, T. R., & Earle, R. W.** (2008). *Essentials of Strength Training and Conditioning*. National Strength & Conditioning Association, USA.
- **Martens, R.** (2012). *Successful Coaching*. Human Kinetics, USA.
- **Magill, R. A., & Anderson, D. I.** (2017). *Motor Learning and Control: Concepts and Applications*. McGraw Hill, USA.
- **Zatsiorsky, V. M., & Kraemer, W. J.** (2006). *Science and Practice of Strength Training*. Human Kinetics, USA.

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-IX
Masters in Physical Education

GENERIC ELECTIVE (GE) – Introduction of Sports Training

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
GE: Introduction of Sports Training	4	4	0	0	Pass Sem VIII	Nil

MASTERS IN PHYSICAL EDUCATION		
Programme: *Masters in Physical Education*	**Year: V**	**Semester: IX** **Paper: GE**
Subject: Physical Education		
Course: GE	**Course Title:** Introduction of Sports Training	

Course Outcome:

- The students will learn about the Meaning and Principles of Sports Training.
- The students will know about various important terms of Sports Training like Load, Adaptation, Super-compensation, and Overload to make it more effective and meaningful.
- The students will be explained about various training methods for improving the Motor abilities of Sportspersons.
- The students will acquire knowledge of Training plans and principles of Periodization for achieving Top form for an athlete.

Credits: 4	136	Discipline Specific Electives
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	**INTRODUCTION TO SPORTS TRAINING** • Introduction, Meaning & Definition of Training • Aim & Objective of Training • Principles of Sports Training	15
II	**FITNESS COMPONENTS** • Strength: Definition and its Types • Endurance: Definition and its Types • Speed: Definition and its Types • Flexibility: Definition and its Types • Coordinative Ability Definition and its Types	15
III	**TRAINING PROCESS** • Technical Training • Tactical Training • Circuit & Weight Training	15
IV	**LOAD ADAPTATION AND PLANNING** • Overview of Training Load & Recovery • Introduction to Periodization	15

Suggested Readings:

- Bill Foran, High Performance Sports Conditioning.
- Frank W. Dick, Sports Training Principles. 4th Edition, Friends Publication, 2006
- G. Gregory Haff & N. Travis Triplett, Essentials of Strength Training and Conditioning. 4th Edition, Human Kinetics, 2016
- Singh, H.: Science of Sports Training. DVS Publication, New Delhi, 1991
- Beachle, T.R.: Earle, R.W.: Essentials of strength training and conditioning, NSCA Publication, 2000.
- Slater, G., & Phillips, S. M. (2011). Nutrition guidelines for strength sports: sprinting,
- weightlifting, throwing events, and bodybuilding. Journal of Sports Sciences, 29(sup1), S67- S77.
- Frank W. Dick, Sports Training Principles. 4th Edition, Friends Publication, 2006
- G. Gregory Haff & N. Travis Triplett, Essentials of Strength Training and Conditioning. 4th Edition, Human
- Kinetics, 2016
- Singh, H.: Science of Sports Training. DVS Publication, New Delhi, 1991
- John SK (2014). 'Health Fitness and Wellness' ISBN No: 978 93 8218665 6 Prestige Books
- International, Delhi.

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-IX

Masters in Physical Education and Sports

DISSERTATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course		Eligibility criteria	Pre-requisite of the course(if any)
		Lecture	Tutorial/Fieldwork/ Practical/Practice		
DISSERTATION	**6**			**Physical Education in Bachelor of Arts**	**Nil**

MASTERS OF PHYSICAL EDUCATION AND SPORTS		
Programme: Masters in Physical Education and Sports	**Year: V**	**Semester: IX** **Paper: Dissertation**
Subject: Physical Education		
Course: DISSERTATION	**Course Title: Dissertation**	

Course Outcomes:

After studying this course, the students will be able to:

- Develop advanced research skills, including the ability to formulate research questions, design methodologies, gather and analyze data, and draw meaningful conclusions.
- Enhance their critical thinking abilities through the evaluation and synthesis of existing literature, identification of gaps in current knowledge, and the development of innovative approaches to their research topic.
- Demonstrate the ability to work independently, manage their time effectively, and take responsibility for their own learning and research process.
- Develop problem-solving skills by addressing challenges and obstacles encountered during the research process.
- Cultivate an understanding of ethical considerations in research, including issues related to plagiarism, and responsible conduct of research.

Credits: 6	**Dissertation**
Max. Marks: As per Univ. rules	**Min. Passing Marks: As per Univ. rules**

Unit	Topic	No. of

		Hours
	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	**90**

Recommended Readings

- Research Methods in Physical Activity" by Jerry R. Thomas, Jack K. Nelson, and Stephen J. Silverman
- *Essentials of Research Methods in Health, Physical Education, Exercise Science, and Recreation" by Kris E. Berg and Richard W. Latin*
- Qualitative Research in Physical Activity and the Health Professions" by William A. Pitney and Jenny Parker

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-X

Masters in Physical Education and Sports

DISCIPLINE SPECIFIC COURSE (DSC)- Psychology in Sports and Physical Education

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the Course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Psychology in Sports and Physical Education	**4**	**4**	**0**	**0**	**Passed IX Sem**	**Nil**

MASTERS IN PHYSICAL EDUCATION AND SPORTS

Programme : Masters in Physical Education and Sports	**Year: V**	**Semester: X** **Paper: DSC**
Subject: Physical Education		
Course: DSC	**Course Title:** Psychology in Sports and Physical Education	

Course Outcomes:

- apply on athletes that enhance their motor skills and learning processes, help them cope better with competitive pressure and anxiety, fine-tune the level of awareness that they need for optimal performance and to not lose focus amidst distractions and in a competitive environment.
- Understand and to imply the concepts of sports psychology and sociology in various sports and games.
- Get equipped with the knowledge of various psychological skills in improvement of performance.

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Credits: 4	**Discipline Specific Course**
Max. Marks: As per Univ. rules	**Min. Passing Marks: As per Univ. rules**

Unit	Topic	No. of Hours
Unit I	• Meaning, History, Scope, Need and Importance of Sports Psychology. • Present status of Sports Psychology in India. • Relationship of Sports Psychology with other Sports Sciences. • Personality: Meaning and definition of personality. • Personality traits of sportspersons. • Effect of personality on Sports Performance • Personality differences among various sports group.	**15**
Unit II	• Psychological peculiarities of young athletes with reference to pre– adolescence and adolescence –Psychomotor, Cognitive and Social Dimension. • Interplay of Heredity and Environment with sports performance, Heredity Principles and Environment. • Role of Family, School and Society in Participation of children in sports. • Psychological problems of Young Athletes. • Individual differences and their implications in sports.	**15**
Unit III	• Cognitive Process: Meaning and Characteristics of Cognitive process in sports. Sensation, Perception, Thinking, Imagination, Memory. • Attention- □ Dimensions of Attention, □ Distractibility in Attention, □ Strategies to develop Attention. • Motor Learning: Meaning of Motor Learning. □ Factors Affecting Motor Learning. □ Motor development in various periods of childhood and adolescence.	**15**
Unit IV	• Motivation: Meaning and definition of Motivation–Motive, Need and Drive. □ Types of Motivation, Relationship between intrinsic and extrinsic motivation, Technique of Motivation. • Role of Motivation in Sports Performance, Achievement Motivation. • Emotions: Meaning and definition of Emotion. • Types of emotion. • Influence of Emotion on Sports Performance, Anxiety, Fear and Aggression. □ Psychological Tests– Visual Perception Test:- Muller Lyer, Mirror Drawing, Depth Perception, E.P.Q:- Thakur & Thakur, Competitive Behaviour Scale:-R. K. Yadav Practicum:	**15**

Recommended Readings

- Alderman, R.B. Psychological Behaviour in sports. (Philadelphia: London, Sounders Company, 1974).
- ButSusan Dorcas, Psychology of Sports (Network: Van Nastr and Reinhold Company) Edn. 2
- Crattybrayant, J. Movement Behaviour and Motor Learning. (Philadelphia: Lea and Febiger, 1973), Edn. 3
- Craty Bryant, J. Psychology and Physical Activity. (New Jersey Englewood Cleffs, Prentice Hall Inc. 1965).
- Cratty Bryant, J. Psychological Proportion and Athletics Excellence. (New York: Movement publications Inc. 1978).
- Kamlesh, M.L. Psychology of physical Education and Sports.
- (NewDelhi:Metropolitan Book Co., Pvt. Ltd. 1983).
- KeneJ. E. Psychological Aspect of Physical Education and sports.(London, Boston: Routledge and K. Egan Paul, 1972)
- Liewellyor Jack H. and Blucker Judy A. Psychology of Coaching Theory and application (Delhi: Surjeet Publishers, 1975).
- RobertGlyn C. Learning Experiences in sports Psychology. (Illinois:Human Kinetics Publisher Inc. 1986)
- Martens R ain e r , C o a c h i n g G u i d e t o Sports Psychology (Illinois: Human
- Kinetics Publisher Inc. 1987).
- Linda K. Binket, RobertJ. Ratellaandann.S.Really. Sports Psychology, Psychological consideration in Maximizin Sports Performance (C. Brown publishers DubugueJawa).
- Gill Dianel: Psychological dynamics of sports (Illinois:HumanKineticspublisher Inc.1987).
- John, D.Lauther, Psychologyof Coaching. (NerJersy:PrenticeHallInc., 2000)

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

Suggested Equivalent OnlineCourses: SWAYAM, MOOCS, https://vidyamintra.inflibnet.ac.in, egyankosh.ac.in

Semester-X
Masters in Physical Education and Sports

DISCIPLINE SPECIFIC ELECTIVE (DSE)- Health Education and Sports Nutrition

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Health Education and Sports Nutrition	**4**	**0**	**0**	**0**	**Passed IX Sem**	**Nil**

Masters in Physical Education and Sports		
Programme: Masters in Physical Education and Sports	**Year: V**	**Semester: X** **Paper: DSE**
Subject: Physical Education		
Course: DSC	**Course Title:** Health Education and Sports Nutrition	

Course Outcome:

After completing this course, the students will be able to-

- learn and accept individual and collective responsibility for healthy living at home , college , university and in the community.
- help students know their health status.
- create awareness among students about safety Measures. To acquaint them with first Aids Measures about common sickness and injuries.
- knows about the Abuse of Drugs and its adverse effect of body and mind.
- knows about the Management of life style, Hyper tension, Obesity and Stress.
- knows about sports Nutrition and it energy Metabolism.
- knows about diet plan and preparation of diet Plan.

Credits: 4	143	Discipline Specific Electives
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	• Concept, Dimensions, Spectrum and Determinants of Health, Definition of Health, Health Education, Health Instruction, Health Supervision; Aim, objective and Principles of Health Education, instruction in personal hygiene and Environmental hygiene	15
II	• Communicable and Non Communicable Diseases, History of Diseases, Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive Population Personal and Environmental Hygiene for schools, Objective of school health service, Role of health education in schools, Health Services Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care	15
III	• Meaning of Hygiene, Type of Hygiene, Effect of Alcohol on Health, Effect of Tobacco on Health, Life Style Management, Management of Hypertension, Management of Obesity, Management of Stress.	15
IV	• Meaning and Definition of Sports Nutrition, Role of nutrition in sports, Basic Nutrition guidelines, energy metabolism (Carbohydrate, Protein and Fat), Role of carbohydrates, Fat and protein during exercise. Role of Vitamins and Minerals. • Concept of BMI (Body mass index), Obesity and its hazard, Dieting versus exercise for weight control, maintaining a Healthy Lifestyle, Weight management program for sporty child, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss.	15

Recommended Readings

- Bucher, Charles A. "Administration of Health and Physical Education Programme".
- Delbert, Oberteuffer, et. al." The School Health Education".
- Ghosh, B.N. "Treaties of Hygiene and Public Health".
- Hanlon, John J. "Principles of Public Health Administration" 2003.
- Turner, C.E. "The School Health and Health Education". Moss and et. At. "Health Education" (National Education Association of U.T.A.)
- Nemir A. 'The School Health Education" (Harber and Brothers, New York). Nutrition Encyclopedia, edited by Delores C.S. James, The Gale Group, Inc.
- Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise as Nature Intended. Angus and Robertson.
- J.E &Park. K. (2007) Preventive and Social Medicine ; Banarsidas Bhanot-Jabalpur M.P.

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

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Semester-X
Masters in Physical Education and Sports

DISCIPLINE SPECIFIC ELECTIVE (DSE)- REMEDIAL AND CORRECTIVE PHYSICAL EDUCATION

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Remedial and Corrective Physical Education	**4**	**3**	**0**	**1**	**Passed Class IX Sem**	**Nil**

MASTERS IN PHYSICAL EDUCATION AND SPORTS		
Programme: Masters in Physical Education in and Sports	**Year: V**	**Semester: X** **Paper: DSE**
Subject: Physical Education		
Course: DSC	**Course Title:** Remedial and Corrective Physical Education	

Course Outcome:

- The course outcomes of "Remedial and Corrective Exercise in Physical Education" aim to equip students with the knowledge and skills necessary to design, implement, and evaluate exercise programs that address specific physical deficiencies, correct postural issues, and enhance overall functional performance.
- It ensure that students completing a course in "Remedial and Corrective Exercise in Physical Education" are well-prepared to design and implement effective exercise programs that address physical impairments, correct postural issues, and enhance overall functional performance, contributing to the holistic well-being of their clients.

Credits: 4	145	Discipline Specific Course
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	• Meaning, importance and scope of posture education. • concept and classification of posture, Correct and incorrectposture, • Static and dynamic posture, Body type and posture	15
II	• Postural Deformities, A study of Physical defects in posture andthe corrections to be arrived at – Kyphosis, Lordosis, Scolliosis • Flat foot. Bowed legs Knocked knees Corrective exercise • Assessment of posture-posture test. Therapeutic exercise andtheir classification.	15
III	• Sports Injuries, Introduction to sports injuries • Role of trained personnel in the management of the sports injuries • Prevention injuries, Factors causing sports injuries • Factors sports injuries, Complications of incomplete treatment	15
IV	• Common sport injuries and their immediate treatment, Sprain,Strain, Contusion and hecatomb, Dislocation, Fracture, Rehabilitation Definition objectives and scope • Effects and uses of the therapeutic modalities in, Coldtherapy, Hot most, Infra Red, Contrast bath, Wax baththerapy, • Massage, Brief history of massage, Principles of application of Massage, Classification of the manipulations used in massage, effects of each such type on different systems of human body, Stroking manipulation, Pressure manipulationPercussion Manipulation	15

Recommended Readings

- Singh, Ajmer et.al. "Modern Text Book of Physical Education, Health and Sports", KalyaniPublishers, Ludhiana,2000
- Singh, Ajmer et.al. "Olympic Movement" Kalyani Publishers, Ludhiana,2000 Sharma,Vyas Dev. "introduction to physical and health education", avichal publishingcompany, new delhi.
- Dagar,R.K.S. & Chauhan, S.K "Psycho-Historical bases of Physical Education" friendspublications, New Delhi 2005.
- Thomas R. Baechle and Roger W. Earle, (2000).
- **ACSM's Guidelines for Exercise Testing and Prescription** (2001), American College ofSports Medicine, New York, U.S.A.
- Anspaugh, D.J., G. Ezell and K.N. Goodman (2006) **Teaching Today Health,** MosbyPublishers, Chicago (USA)
- Beotra, Alka (2001-02) **Drug Education Handbook on Drug Abuse in Sports,** AppliedNutrition Sciences, Mumbai.

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

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Semester-X
Masters in Physical Education and Sports

DISCIPLINE SPECIFIC ELECTIVE (DSE)- Sports Specialization – II

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Sports Specialization – II (Skill Proficiency) Athletics/Badminton/ Basketball/Cricket/ Football/Gymnastics/ Handball/Hockey/ Kabaddi &Kho-Kho/Lawn Tennis/ Volleyball/Yoga (Any One)	**4**	**0**	**0**	**0**	**Passed Class IX Sem**	**Nil**

MASTERS IN PHYSICAL EDUCATION AND SPORTS		
Programme: Masters in Physical Education and Sports	**Year: V**	**Semester: X** **Paper: DSE**
Subject: Physical Education		
Course: DSC	**Course Title:** Sports Specialization – II (Skill Proficiency) Athletics/Badminton/Basketball/Cricket/ Football/Gymnastics/Handball/Hockey/ Kabaddi &Kho-Kho/Lawn Tennis/ Volleyball/Yoga (Any One)	

Course Outcome:

- Demonstrate mastery in fundamental and advanced techniques of the chosen sport.
- Apply biomechanical principles to enhance performance and minimize injury risks.
- Exhibit a comprehensive understanding of the official rules and regulations.
- Officiate competitions effectively and make fair judgments based on game situations.
- Design structured training plans focusing on skill development, fitness, and tactical strategies.
- Utilize periodization principles to enhance athlete performance in a competitive setting.

Credits: 4	147	Discipline Specific Electives
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
I	• Introduction and Historical Development of games with special reference to India. • Important Tournaments held at National and International Levels. • National sports Awardees related to the game.	15
II	• Organizational set-up at national and International level (governing Bodies) • Measurement and Markings of concern game. • Facilities and Equipment of games.	15
III	• Training and development of fundamental skill and techniques of the game. • Training and development of advance techniques of the game. Implementation of drills for the technical Training.	15
IV	• Strategy and tactics of the game • Training and development of Basic tactics. • Training and development of Advance Tactics. • Rules and their interpretation of concern game. • Duties and responsibilities of the Technical Officials. • Training / coaching Lesson plan of the game.	15

Recommended Readings

- **Khan, E. A.** (2016). *Modern Coaching in Sports*. Sports Publications, New Delhi.
- **Sharma, V. M.** (2018). *Scientific Principles of Sports Training*. Friends Publications, India.
- **Sodhi, H. S.** (2005). *Sports Biomechanics and Kinesiology*. Anmol Publications, New Delhi.
- **Kamlesh, M. L.** (2019). *Physical Education: Facts and Foundations*. Khel Sahitya Kendra, New Delhi.
- **Singh, H.** (2012). *Science of Sports Training*. DVS Publications, India.
- **Shekar, K. C.** (2015). *Theory and Practice of Sports Coaching*. Sports Publications, India.
- **Satyanarayana, L.** (2014). *Athletic Training and Conditioning*. Khel Sahitya Kendra, New Delhi.
- **Bompa, T. O., & Haff, G. G.** (2018). *Periodization: Theory and Methodology of Training*. Human Kinetics, USA.
- **Schmidt, R. A., & Wrisberg, C. A.** (2008). *Motor Learning and Performance: A Situation-Based Learning Approach*. Human Kinetics, USA.
- **Wilmore, J. H., Costill, D. L., & Kenney, W. L.** (2021). *Physiology of Sport and Exercise*. Human Kinetics, USA.
- **Baechle, T. R., & Earle, R. W.** (2008). *Essentials of Strength Training and Conditioning*. National Strength & Conditioning Association, USA.
- **Martens, R.** (2012). *Successful Coaching*. Human Kinetics, USA.
- **Magill, R. A., & Anderson, D. I.** (2017). *Motor Learning and Control: Concepts and Applications*. McGraw Hill, USA.
- **Zatsiorsky, V. M., & Kraemer, W. J.** (2006). *Science and Practice of Strength Training*. Human Kinetics, USA.

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Semester-X

Masters in Physical Education and Sports

GENERIC ELECTIVE (GE) – Obesity and Weight Management

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
(GE) - Obesity and Weight Management	4	4	0	0	Pass Sem IV	Nil

MASTERS IN PHYSICAL EDUCATION AND SPORTS		
Programme: Masters in Physical Education and Sports	**Year: III**	**Semester: V** **Paper: GE**
Subject: Physical Education		
Course: GE	**Course Title:** Obesity and Weight Management	

Course Outcomes:

After studying this course, the students will be able to:

- The learner will learn about the concept of obesity and its causes.
- The learner will practice and manage the ways to prevent obesity.
- The learner can assess the obesity (Basic methods).
- The learner can practice and maintain a healthy weight.
- The learner can modify behavior to control weight through diet and physical activities.

The learner can design a balanced diet chart for his/her requirements

Credits: 4	**DSC**
Max. Marks: As per Univ. rules	**Min. Passing Marks: As per Univ. rules**

Unit	Topic	No. of Hours

Unit I	**OBESITY & IT'S ASSESSMENT** • Concept and Causes of Obesity. • Health Risks Associated with Obesity. • Assessment of Obesity-Body Mass Index (BMI), Waist-Hip Ratio, Waist-Height ratio, Skinfold Thickness (Abdomen, triceps, thigh, Suprailliac).	15
Unit II	**MANAGEMENT OF OBESITY THROUGH DIET** • Nutrition and Balanced Diet. • Dietary Aids and Gimmicks. • Obesity and weight management through diet.	15
Unit III	**WEIGHT MANAGEMENT** • Concept of weight, Importance of weight Management in Life. • Cultural and social aspects, Lifestyle patterns in contemporary system. • Goal setting and goal accomplishment, Self-control skills for weight management.	15
Unit IV	**WEIGHT MANAGEMENT THROUGH PHYSICAL ACTIVITIES AND BEHAVIOUR** • Importance of maintaining Healthy Weight; Weight Management and Energy Balance. • Principles of weight management; Aerobic & Anaerobic activities. • Behavior Modification techniques for weight management.	15

Suggested Readings:

- Pawar, B., Joshi.A., Chaudhary, V. (2022), "Practical Manual for Physical Education", Friends Publications. New Delhi (India) ISBN-978-93-95829-30-4.
- Kumar, P (2022). "Assessment & Management of Obesity". Friends Publication (India)
- Saini N., Suri. M., (2020) "Sports Psycho-Physiology", Friends Publication, New Delhi (India) ISBN-978-93-88457-58-3.
- "Sports Nutrition and Weight Management", ISBN: 978-93-88269-53-7, Year 2019, published by Sports Publication, Darya Ganj, New Delhi-110002
- Anspaugh, D. J., Hamrick, M. H., &Rosato, F. D. (2006). "Wellness: Concepts and applications". McGraw-Hill Companies.
- Caliendo, M. A. (1981). "Nutrition and preventive health care". Macmillan.
- Hales, D. (2006). "An invitation to health". Cengage Learning.

- Hoeger, W. W. K., &Hoeger, S. A. (2007). “Fitness & Wellness. Belmont”, USA: Thomson Wadsworth
- Howley, E. T., & Franks, B. D. (1986). “Health/Fitness Instructor's Handbook”. Human Kinetics Publishers, Inc., Marketing Director, Box 5076, Champaign, II.
- Kansal D.K. (2012). “Test Measurement and Evaluation”. Sports Spiritual Sciences Publications, New Delhi.
- Kumari, S. S., Rana, A., &Kaushik, S. (2008). “Fitness, Aerobics & Gym Operations”. New Delhi: Khel Sahitya Kendra
- Sharma K. et. al. (2014), “Fitness Aerobics & Gym Operations”, Jyoti Enterprises, Delhi.
- Tiwari S. (1999). “Exercise Physiology”, Sports Publications, Delhi.
- Shaw D. (2018) “Fundamental Statistics in Physical Education and Sports Sciences” Sports Publication, ISBN: 81-86190-57-0.
- Shaw D. (2020) “Physical Education Practical Manual for Class XI” Prachi Publication, ISBN: 978-8193-7698-0-5.
- Shaw D. (2020) “Physical Education for Class XII” Prachi Publication, ISBN: 978-81-7730-848-8.
- Shaw D. (2020) “Physical Education for Class XI” Prachi Publication, ISBN 978-81-7730-847-1.
- Shaw D. (2020) “Physical Education Practical Manual for Class XII” Prachi Publication, ISBN 978-81-937698-1-2.
- Shaw D. (2020) “Parable Global English Hindi Dictionary of Physical Education & Sports Sciences” Khel Sahitya Kendra, ISBN 978-93-90461-18-9.
- Shaw D. (2020) “Yoga Asanas and their Benefits” Sports Publication, ISBN 978-81-9436-11-9-0.

Suggested Continuous Evaluation Methods: Assignment /Practical /Viva Voce/ Test/ Quiz (MCQ)/ Seminar/ Presentation/. Overall Performance throughout the Semester (includes attendance, Behavior/ Discipline, and participation in activities)

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Semester-X

Master of Physical Education and Sports

DISSERTATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course		Eligibility criteria	Pre-requisite of the course(if any)
		Lecture	Tutorial/Fieldwork/ Practical/Practice		
DISSERTATION	**6**			**Passed IX Sem**	**Nil**

MASTERS IN PHYSICAL EDUCATION AND SPORTS		
Programme : Master of Physical Education and Sports with Research	**Year: V**	**Semester: X** **Paper: Dissertation**
Subject: Physical Education		
Course: DISSERTATION	**Course Title: Dissertation**	

Course Outcomes:

After studying this course, the students will be able to:

- Develop advanced research skills, including the ability to formulate research questions, design methodologies, gather and analyze data, and draw meaningful conclusions.
- Enhance their critical thinking abilities through the evaluation and synthesis of existing literature, identification of gaps in current knowledge, and the development of innovative approaches to their research topic.
- Demonstrate the ability to work independently, manage their time effectively, and take responsibility for their own learning and research process.
- Develop problem-solving skills by addressing challenges and obstacles encountered during the research process.
- Cultivate an understanding of ethical considerations in research, including issues related to plagiarism, and responsible conduct of research.

Credits: 6	**Dissertation**
Max. Marks: As per Univ. rules	**Min. Passing Marks: As per Univ. rules**

Unit	Topic	No. of

		Hours
	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	**90**

Recommended Readings

- Research Methods in Physical Activity" by Jerry R. Thomas, Jack K. Nelson, and Stephen J. Silverman
- *Essentials of Research Methods in Health, Physical Education, Exercise Science, and Recreation" by Kris E. Berg and Richard W. Latin*
- Qualitative Research in Physical Activity and the Health Professions" by William A. Pitney and Jenny Parker

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