(Accredited by NAAC with 'A' Grade)

ಕ್ರಮಾಂಕ/ No.: MU/ACC/CR 30/2019-20/A2

ಕುಲಸಚಿವರ ಕಛೇರಿ

ಮಂಗಳಗಂಗೋತ್ರಿ - 574 199

Office of the Registrar Mangalagangothri – 574 199

ದಿನಾಂಕ/Date: 02.05.2020

NOTIFICATION

Sub: Modifications in the teaching practice curriculum for MPEd II,III and IV semesters.

Ref. 1. Decision of BOS in Physical Education meeting dated 11.10.2019.

2. Approval of faculty of Education meeting dated 07.11.2019

3. Approval of the Academic Council meeting dated 03.02.2020

Pursuant to the above, modifications in the teaching practice curriculum for II, III and IV semesters of M.P.Ed. degree programme is hereby circulated for implementation with effect from the academic year 2020-21.

REGISTRAR

To:

- 1. The Chairman / Co-ordinator of the Department / P.G. programme concerned.
- 2. The Principals of the Colleges concerned.
- 3. The Registrar (Evaluation), Mangalore University
- 4. The Chairman, BOS in Physical Education, Mangalore University
- 5. The Superintendent (ACC), O/o the Registrar, Mangalore University.
- 6. Guard File.

MANGALORE UNIVERSITY DETAILS OF M.P.Ed COURSE PATTERN, SYLLABUS AND SCHEME OF EXAMINATION

SEMESTER – I

	Part A: Theo	retical Co	ourse			
Course	ourse Title of the Papers		Credit	Internal Marks	External Marks	Total Marks
	Hard Co	re Course	es			
MDH 401	Research Process in Physical Education					
	and Sports Sciences	4	4	30	70	100
MDH 402	Principles and Methods of Sports					
	Training	4	4	30	70	100
MDH 403	Tests, Measurement and Evaluation in					
	Physical Education	4	4	30	70	100
	Soft Core Cou	ırses (Any	y one)			
MDS 404	Yogic Sciences	3	3	30	70	100
MDS 405	Sports Technology	1				
	Part-B Practical	Hard Cor	e Course	s		
MDH406	Specialization -Track and Field I	4	2	30	70	100
	Running Events and Hurdles					
MDH407	DH407 Laboratory Practical: Sports Training		2	30	70	100
MDH408	Laboratory Practical - Test ,	4	2	30	70	100
	Measurement and Evaluation					
	Practical Course	- Soft Co	re Course	2		
MDS409	Specialization -					
	Wrestling/Football/Hockey (any one)	4	2	30	70	100
	Total	31	23	240	560	800

SEMESTER - II

	Part A :Theo	retical C	ourse			
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
	Hard Con	e Course	es	1		1
MDH451	Fitness, Wellness and Lifestyle Management (Open elective)	3	3	30	70	100
MDH452	Applied Statistics in Physical Education & Sports	4	4	30	70	100
MDH453	Physiology of Exercise.	4	4	30	70	100
	Soft Core Cou	ırses (An	y one)			
MDS454	Sports Journalism and Mass Media			30	70	100
MDS455	Sports Management	3	3	30	70	100
	Part-B Practical	Hard Co	re Cours	e		
MDH456	Track and Field II: Jumping Events	4	2	30	70	100
MDH457	Laboratory Practical – Physiology of Exercise	4	2	30	70	100
MDH458	(A) Coaching Lessons of Track and Field events specialization.			30	70	
	(B) Coaching lessons of Game Specialization.	4	2			100
	Practical Sof	t Core C	ourse	•		·
MDS459	Specialization: Kho-Kho/ Volleyball/Cricket (Any one game)	6	3	30	70	100
	Total	32	23	240	560	800

Semester - III

	Part A : Theor	etical Co	urse				
Course		Total		Internal	External	Total	
Code	e Title of the Papers Hours Credit		Credit	Marks	Marks	Marks	
	Hard Core	Courses	}			I	
MDH501	Contemporary trends in Physical	3	3	30	70	100	
	Education and Sports (Open elective)	3	3	30	/0	100	
MDH502	2 Sports Psychology		4	30	70	100	
	Soft Core Cour	ses (Any	two)			I	
MDS503	Sports Sponsorship	3	3	30	70	100	
MDS504	4 Adapted and Corrective Physical 3 3	3					
	Education	3	3	30	70	100	
MDS505	Sports Medicine	3	3	30	70	100	
	Part–B Practical H	ard Core	Courses	1			
MDH506	Track and Field III: Throwing						
	Events	4	2	30	70	100	
MDH507	Laboratory Practical: Sports	4	2	30	70	100	
	Psychology	4	4			100	
MDH508	Internship	4	2	30	70	100	
	Practical Soft	Core Co	urse	I	l	l	
MDS509	Games Specialization: Badminton /	6	3	30	70	100	
	Kabaddi / Weightlifting (Any one)	U	3	30	/0	100	
Total		31	22	240	560	800	

Semester - IV

	Part A : Theoreti	cal Cour	se			
Course		Total		Internal	External	Total
Code Title of the Papers		Hours	Credit	Marks	Marks	Marks
	Hard Core C	Courses		<u> </u>	<u>I</u>	
MDH551	Dissertation/Project	4	4	30	70	100
MDS552	Biomechanics and Kinesiology	4	4	30	70	100
	Soft Core Courses	s (Any Tv	vo)	I		
MDS553	Value and Environmental Education	3	3	30	70	100
MDS554	Sports Sociology	3	3	30	70	100
MDS555	Information and Communication Technology (ICT) in Physical Education	3	3	30	70	100
	Part-B Practical Har	d Core C	ourses	I		
MDH556	Track and Field IV: Combined Events,					
	Cross Country, Race Walking, Track and Field marking and officiating	4	2	30	70	100
	Practical Soft Co	ore Cours	se		1	
MDS557	Laboratory Practical: Computer					
	Applications	4	2	30	70	100
MDS558	8 Laboratory Practical: Biomechanics and Kinesiology		2	30	70	100
	Practical Soft Co	ore Cours	se			I
MDS559	Games Specialization: Handball / Tennis	6	3	20	70	100
	/ Basketball (Any one)	0	3	30	70	100
	Total of IV semester	32	23	240	560	800
	Total of all semesters	126	91	960	2240	3200

Courses to be registered by a student in a normal phase to successfully complete MPEd Degree in four semesters.

	Hard Core Courses		Soft Core	Courses	Total		
I to IV	Numbers Credits Numbers Credits		Numbers	Credits			
Semesters	20	58	12	33	32	91	

Credits required for MPEd Course

	Hard Core Courses		Soft Core	Courses	Total		
I to IV	Numbers	Credits	Numbers Credits		Numbers	Credits	
Semesters	20	58	12	33	32	91	

Semester I Theory Course

MDH 401: RESEARCH PROCESSES IN PHYSICAL EDUCATION AND SPORTS SCIENCES

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

- To familiarise the student with the dimensions and methods of research.
- To orient the student to make an informed choice from the large number of alternative methods and experimental designs available.
- To analyse an event or process or phenomenon to identify the cause and effect relationship
- To enable the student to present a good research proposal.
- To familiarise the student with the nature of research and scientific writing
- To empower the student with the knowledge and skills they need to undertake a research project, to present a conference paper and to write a scientific article.
- To find solution to scientific or non-scientific and social problem to overcome or solve the problem in occurring in our day life

UNIT I: Introduction

- Meaning and Definition of Research Need, Nature and Scope of research in Physical Education and Sports.
- Classification of Research, Defining Problem, Location of Research Problem, Criteria for selection of a problem, Qualities of a researcher.
- Locating Reference Materials, Procedure of review of related literature.

UNIT II: Methods and Tools of research

- Descriptive Methods of Research; Survey Study, Case study, Historical Research, Steps in Historical Research, Sources of Historical Research: Primary Data and Secondary Data, Historical Criticism, Philosophical Research. 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.
- Tools of Research Questionnaire, Opinionnaire Interviews, Schedules, Observation Techniques, Rating Scales, Electronic Media

UNIT III: Sampling and Hypothesis

- Meaning and Definition of Population and Sample. Types of Sampling; Probability Methods; Systematic Sampling, Cluster sampling, Stratified Sampling. Area Sampling – Multistage Sampling. Non- Probability Methods; Convenience Sample, Judgment Sampling, Quota Sampling.
- Meaning and Definition of Hypothesis. Types of Hypothesis, Formulation and design of Hypothesis.

UNIT IV: Research Proposal and Report

- Method of Writing Research proposal, Cauterization of Thesis, Front Materials, Body of Thesis – Back materials, Method of writing abstract and full paper for presenting in a conference and to publish in journals, Mechanics of writing Research Report, Format of Footnote and Bibliography.
- Manuals, format of the research report, Main Body of the Report, References and Appendices: The Thesis or Dissertation, style of writing, reference form, pagination Tables, figures, The line graph, the Bar graph or chart, The circle chart or pie or sector chart, Maps, organization charts, evaluating or research report, summary.

REFERENCE:

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 for Sport 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) Research Methodology in Physical Education and Sports, New Delhi Moses, A. K. (1995) Thesis Writing Format, Chennai; Poompugar Pathippagam Rothstein, 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

Semester I Theory Course

MDH 402: PRINCIPLES AND METHODS OF SPORTS TRAINING

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

To work as physical education teachers and coaches with greater efficiency.

To train athletes and teams appropriately to their age in the selected sports discipline.

To apply the acquired and in-depth knowledge as well as their methodical competences in practical sports training under different conditions.

To analyse development tendencies in their selected sports discipline and to take this into consideration when planning their own training process;

To choose appropriate and more effective training measures for the preparation of athletes for national and international competitions

To act as multipliers in the selected sports discipline, e.g. by organizing training and further education courses for sports instructors in their home country.

To promote further development of sports structures and acquisition of new target groups in the field of sport.

UNIT I : Meaning of Sports Training and Concept of Load

- Sports training: Definition Aim, Characteristics
- Principles of Sports Training
- Load Definition, Characteristics of load.
- Overload Meaning, Causes of Over Load, Symptoms of Overload, Remedial Measures
- Means of recovery
- Super Compensation

UNIT II: Components of Physical Fitness and Talent Identification

- Strength: Types of strength, Methods to improve Strength.
- Speed: Types of speed and methods to develop speed
- Endurance: Types of endurance and methods to develop endurance
- Flexibility: Types of flexibility and methods to develop flexibility
- Agility and coordinative ability: Types of coordinative abilities and methods to develop them.
- Talent Identification through Physical, Psychological, Physiological and Sociological aspects.

UNIT III: Methods and Means of training

- Continuous method Meaning, characteristics, types Slow continuous, fast continuous
- Interval method Meaning, characteristics, types intensive interval, extensive interval
- Repetition method Meaning and characteristics
- Circuit training Meaning and types

- Fartlek training, sand training, Plyometrics, resistance training
- Means of training Principle means Physical Exercises: General, Specific and Competition
- Additional Means of training: Pedagogical measures Physiotherapeutic means, Psychological means, Physiological and Biomechanical means, natural means and material objects.

UNIT IV - Periodization, Training Plan and Competition Preparation

- Periodisation Meaning, types Single, Double and Multiple Periodization, Preparatory Period, Competition Period and Transition Period.
- Training Plan: Short Term and Long Term Plans, Cycles Macro Cycle, Meso-Cycle, Micro cycle, training session.
- Competition types, Technical and Tactical Preparation Concept of Techniques, Tactics and Strategy.
- Methods of developing Techniques and Tactics training, Control and evaluation of Tactical Knowledge.

References

Bunn, J.N. (1998) Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice Hall Inc.

Cart, E. Klafs& Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C.V. Mosby Company

Daniel, D. Arnheim (1991) Principles of Athletic Training, St. Luis, Mosby Year Book David R. Mottram (1996) Drugs in Sport, School of Pharmacy, Liverpool: John Moore University

Gary, T. Moran (1997) – Cross Training for Sports, Canada: Human Kinetics. Hardayal Singh (1991) Science of Sports Training, New Delhi, DVS Publications.

Jensen, C.R. & Fisher A.G. (2000) Scientific Basic of Athletic Conditioning, Philadelphia.

Ronald, P. Pfeiffer (1998) Concepts of Athletics Training 2nd Edition, London: Jones and Bartlett Publications

Yograj Thani (2003), Sports Training, Delhi: Sports Publications.

Thomas Kurz Science of Sports Training: How to Plan and Control Training for Peak Performance.

Semester I Theory Course

MDH 403: TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

- Placement in classes/programs or grouping based on ability
- To determine what knowledge, skills, abilities, habits and attitudes have been acquired.
- To determine what progress or extent of learning attained.
- To determine strengths, weaknesses, difficulties and needs of students.
- To help in study habits formation.
- To develop the effort-making capacity of sports persons.
- To serve as aid for guidance, counselling, and prognosis.
- To serve as basis or guide for curriculum making and developing.
- Evaluation of achievement to determine if individuals have reached important objectives.

UNIT I: Introduction

- Meaning, Definition and scope of Test, Measurement and Evaluation.
- Criteria for Test Selection—
 Scientific Authenticity. Meaning, definition and establishing Validity, Reliability, Objectivity, Norms—Administrative Considerations.
- Construction of physical fitness test, knowledge test, skill tests.

UNIT II: Motor Fitness and Physical Fitness tests

- Meaning and Definition of Motor Fitness.
- Test for Motor Fitness; Oregon Motor Fitness Test (Separately for boys and girls) Motor Ability; Barrow Motor Ability Test– Newton Motor Ability Test–Muscular Fitness–Kraus Weber Minimum Muscular Fitness Test.
- Physical Fitness Tests 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)
- Motor Educability Tests: Metheny- Johnson motor educability test.

UNIT III: Anthropometric and Aerobic-Anaerobic Tests

- Anthropometric Measurements:
- Method of Measuring Height: Standing Height, Sitting Height. Method of measuring Circumference: Arm, Waist, Hip, Thigh. Method of Measuring Skin folds: Triceps, Sub scapular, Suprailiac.

• Physiological Testing: Aerobic Capacity: The Bruce Treadmill Test Protocol, 1.5 Mile Run test for collegiate males and females, Anaerobic Capacity: Margaria- Kalamen test, Wingate Anaerobic Test.

UNIT IV: Skill Tests

Specific Sports Skill Test: **Badminton**: Miller Wall Volley Test. **Basketball:** Johnson Basketball Test, Harrison Basketball Ability Test. **Cricket**: Sutcliff Cricket test. **Hockey:** Friedel Field Hockey Test, Harban's Hockey Test, **Volleyball:** Russel Lange Volleyball Test, Brady Volleyball Test. **Football:** Johnson Soccer Test, Mc- Donald Volley Soccer Test. **Tennis:** Dyer Tennis Test. Handball: Cornish Handball Test.

REFERENCES:

Authors Guide (2013) A CSM'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: Scarecrow Press

Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company

Getchell B (1979) Physical Fitness A Way of Life, 2nd Edition New York, John Wiley and Sons, Inc

Jenson, Clayne Rand Cyntha, C. Hirst (1980) Measurement in Physical Education and Athletics, New York, Macmillan Publishing Co. Inc

Kansal D. K. (1996), "Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications

Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication

Vivian H. Heyward (2005) Advance Fitness Assessment and Exercise Prescription, 3rd Edition, Dallas TX: The Cooper Institute for Aerobics Research

Wilmore J H and Costill D L. (2005) Physiology of Sport and Exercise: 3rd Edition. Champaigm I L: Human Kinetics

Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications

Alan C Lacy (2010), Measurement and Evaluation in Physical Education, Pearson Benjamin Cummings

D. Roy Collim, Patrick B Hodges (2001) A Comprehensive Guide to Sports Skills Test and measurement, Scarecron Press

James R Marrow Jr., Allen w Jackson James G Disch (2011) Measurement and Evaluation in Human Performance, 4th Edition, Human Kinetics

Barry L. Jonson, Jack K Nelson (1986) Practical Measurement for evaluation in Physical Education, Burgess Publications.

Semester I Theory Course

MDS 404: YOGIC SCIENCES (Elective)

Number of credits: 3 Number of hours: 3 Marks: Internal - 30 External - 70

Objectives:

- To understand the common grounds of yoga and physical education and sports
- To understand the anatomy and Physiology of asanas and pranyams kriyas.
- To gain knowledge regarding the application yoga
- To gain knowledge regarding the effects of yoga exercise on the human body health and sports
- To understand the teacher role, responsibilities to promote yoga education school and society
- Knowledge of classical and theoretical foundations of the field of Yoga.

Unit I: Introduction to Yoga

- Meaning, Definition, Scope and importance of Yoga
- Streams of Yoga: Hatha Yoga, Raja Yoga, Karma Yoga, Bhakti Yoga and Gnana Yoga.
- Limbs of Yoga (Astanga Yoga): Yama, Niyama, Asana, Pranayama, Prathyahara, Dharana, Dhyana, Samadhi.
- Essentials of Yoga Practices; Age, Diet, Time, Bathing, Clothes, Place, Awareness, Sequence, Emptying bowels, Stainless Condition, Breathing and Relaxation.
- Indications and Contra indications of Yoga Practice.

Unit II Asanas and pranayam

- Loosening exercise: techniques and benefits. Asans: Types- techniques and Benefits, surya Namaskar; Methods and benefits.
- Pranayam: Methods and benefits. Nadis: Meaning, Methods and benefits, Chakras: major chakras Benefits of clearing and balancing chakras.

Unit-III Kriyas .Bandhas. Mudras and Meditation

- Shatkriyas- Meaning Techniques and benefits of Neti-Dhati-kapalpathi –Trataka- Nauli-Basti
- Bandhas: Meaning Techniques and Benefits of Jalendra Bandha, jihvaBandha, uddiyana Bandhas, Mula Bandha
- Mudras: Meaning Techniques and Benefits of Hasta Mudra, Asamyuktahastam, Samyuktahastam, ManaMudra, KayaMudra, BandaMudra, AdharaMudra.
- Meditation: Meaning Techniques and benefits Meditation-passive and active, saguna Meditation. Nirguna Meditation.

Unit-IV Yoga and Sports

- Yoga Supplemental Exercise-yoga Compensation Exercise- Yoga Regeneration Exercise Power yoga.
- Role of yoga in Psychological Preparation of athlete: Mental Wellbeing .Anxiety, Depression Concentration, Self Actualization.
- Effect of yoga on physiological system: Circulatory, Skeletal, Digestive, Nervous, Respiratory, Excretory system

Note: Practical shall be designed and arranged internally.

. REFERENCE:

George Feuerstein, (1975). Text Book of Yoga. London: Motilal Bansaridass Publishers (P) Ltd.

Gore, (1990), Anatomy and Physiology of Yogic Practices. Lonavata: Kanchan Prkashan. Helen Purperhart (2004), The Yoga Adventure for Children. Netherlands: A Hunter House book.

Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.

Karbelkar N.V.(1993) Patanjal Yogasutra Bhashya (Marathi Edition) Amravati: Hanuman VyayamPrasarakMandal

Kenghe.C.T. (1976). Yoga as Depth-Psychology and para-Psychology (Vol-I): Historical Background, Varanasi: Bharata Manishai.

Kuvalyananada Swami & S.L. Vinekar, (1963), Yogic Therapy – Basic Principles and Methods. New Delhi: Govt. of India, Central Health Education and Bureau.

Moorthy A.M. & Alagesan. S. (2004) Yoga Therapy. Coimbatore: Teachers Publication House.

Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.

Swami Satyananada Sarasvati. (1989), Asana Pranayama Mudra Bandha.Munger: Bihar School of Yoga. Swami Satyananda Saraswathi. (1984), Kundalini and Tantra, Bihar: Yoga Publications Trust.

Swami Sivananda, (1971), The Science of Pranayama. Chennai: A Divine Life Society Publication. Thirumalai Kumar. S and Indira. S (2011)

Tiwari O.P. (1998), Asanas-Why and How.Lonavala: Kaivalyadham.

SatyaMurty.K, Elements of Yoga ,Vedadri Brahma Gnana Kendra, Pedakakani, Guntur, India,(2015)

Semester I Theory Course

MDS 405: SPORTS TECHNOLOGY (Elective)

Number of credits: 3 Number of hours: 3 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should understand

- Meaning, purpose, advantages and applications of Sports Technology.
- the current application of advanced technology for better performance in sports.
- monitoring and training technology and materials technology to enhance sport performance.
- the current and future impact of technology on sports materials
- ethics of using advanced technology in the fields of sports.

Unit I: Sports Technology

- Meaning and definition of Sports Technology.
- 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 moulding, technology, Nano turf. Foot wear production, Factors and application in sports, constraints.
- Foams- Polyurethane, Polystyrene, Styrofoam, closed- cell and open-cell foams, Neoprene, Foam.
- Smart Materials Shape Memory Alloy (SMA), Thermo chromic film, High-density modeling foam.
- Playing Equipment: Balls, Bat, Stick, Racquets, Clothing and shoes: Types, Materials and Advantages.

Unit III: Surfaces of Playfields

- Modern surfaces for playfields, construction and installation of sports surfaces. Types of materials synthetic, wood, Polyurethane.
- Artificial turf.
- Modern technology in the construction of indoor and outdoor facilities. Technology in manufacture of modern play equipment.
- Use of computer and software in Match Analysis and Coaching.

Unit IV: Modern equipment and Training Gadgets

• Measuring equipment: Throwing and Jumping Events. Protective equipment: Types, Materials and Advantages. Sports equipment with Nano technology, Advantages.

- Basketball: Ball Feeder, Mechanism and Advantages. Cricket: Bowling Machine, Mechanism and Advantages, Tennis: Serving Machine, Mechanism and Advantages, Volleyball: Serving Machine Mechanism and Advantages.
- Lighting Facilities: Method of erecting Floodlit and measuring luminous. Video Coverage: Types, Size, Capacity, Place and Position of Camera in Live coverage of sporting events.

Note: Students should be encouraged to design and manufacture improvised sports testing equipment in the laboratory/workshop and visit sports technology factory/sports goods manufacturers.

REFERENCE:

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. Principles and Methods of Education (Paul Publishers, Jullandhar), 1999.

Kochar, S.K. <u>Methods and Techniques of Teaching</u> (New Delhi, Jullandhar, Sterling Publishers Pvt. Ltd.), 1982.

Kozman, Cassidy and Jackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

MDH 406: TRACK AND FIELD I: RUNNING EVENTS, HURDLES AND RELAYS

Number of credits: 2 Number of hours: 2 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should be able to

- Perform block starts and different finishing techniques in sprinting.
- Perform hurdling technique.
- Understand the different methods of baton exchange and perform the same.

Sprints

- Start, Acceleration, Finish, Running styles in sprint,
- Related drills.
- Strategies and Tactics.

Middle Distance and Long Distance Race:

- Start, Acceleration, Finish, Running styles in Middle Distance and Long Distance Race,
- Related drills
- Strategies and Tactics.

Hurdles

- Leading leg and trailing leg clearance techniques, strides between hurdles,
- Related drills.
- Strategies and Tactics.

Relays

- Baton exchange for different relays.
- Related drills.
- Strategies and Tactics.

Rules, Regulations, Officiating and Marking for above Track Events.

SPECIALISATION RECORD

UNIT 1: History and development of the Sprints, Hurdles and Relays.

- Origin of the event
- Growth and development of the event

UNIT 2: Skills and Techniques

• Block start, Sprint technique

- Hurdling technique
- Baton exchange techniques
- Training drills and progression of teaching skills

UNIT 3: Fitness training

- Energy system involved in the event
- Training to develop the fitness parameters involved in the event
- Training plan of six weeks for sprints, hurdles and relays

UNIT 4: Rules and Regulations

- Officials required for the track events
- Rules pertaining to sprints, hurdles and relays.

UNIT 5: Layout , construction and maintenance of track.

• Marking track events.

UNIT 6: Organization, Administration and managerial set up for conducting track events.

UNIT 7: Biomechanical principles of track events

- Block start
- Sprint
- Hurdling

UNIT 8: Injuries and Nutrition

- Event related injuries, prevention, treatment and rehabilitation.
- Nutrition specific to the event

*The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting.

MDH 407: LABORATORY PRACTICAL – SPORTS TRAINING

Number of credits: 2 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

- To work as physical education teachers and coaches with greater efficiency.
- To train athletes and teams appropriately to their age in the selected sports discipline.
- To apply the acquired and in-depth knowledge as well as their methodical competences in practical sports training under different conditions.
- To analyse development tendencies in their selected sports discipline and to take this into consideration when planning their own training process;
- To choose appropriate and more effective training measures for the preparation of athletes for national and international competitions.

Unit I: Warming up

General warming up, specific warming up, limbering down., specific, exercises – General, specific. Limbering down: Stretching exercises, individual and with partners.

Unit II: Strength training

Multi gym, Weight training, Plyometric training, Medicine ball, Set training, Station training, and circuit training – (with equipment and without equipment).

Unit III: Speed Training

Locomotor ability, Reaction ability, Acceleration and Speed endurance.

Unit IV: Endurance Training

Unit V: Training for agility and coordinative ability

Unit VI: Flexibility training

Stretch and hold method, ballistic method.

Unit VII: Methods of training

- Continuous training Slow continuous, Fast continuous Training, Fartlek training, Cross- country.
- Interval method of training: Extensive interval, Intensive interval
- Repetition method of training

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

MDH 408: LABORATORY PRACTICAL – TEST, MEASUREMENT AND EVALUATION

Number of credits: 2 Number of hours: 2 Marks: Internal - 30 External - 70

Objectives:

- Placement in classes/programs or grouping based on ability
- To determine what knowledge, skills, abilities, habits and attitudes have been acquired.
- To determine what progress or extent of learning attained.
- To determine strengths, weaknesses, difficulties and needs of students.
- To develop the effort-making capacity of sports persons.
- To serve as aid for guidance, counselling, and prognosis.
- Evaluation of achievement to determine if individuals have reached important objectives.
- Prediction of an individual's level of achievement in future activities or predict one measure from another measure.
- 1. Measurement of Flexibility:
 - Wells and Dillon Sit and reach test
 - Kraus- Weber floor touch test
- 2. Measurement of Strength:
 - Rogers strength and physical fitness index
- 3. Measurements of Cardio-Vascular Fitness Test.
 - Coopers 12 minutes run and walk test
 - Harvard step test.
 - Multi-stage fitness test (Beep test)
- 4. Motor- Fitness Test JCR test.
- 5. Motor Ability Newton Motor Ability Test
- 6. Motor Educability Test- Johnson motor educability test
- 7. Muscular Fitness Kraus Weber Minimum Muscular Fitness Test.
- 8. Anthropometric Measurements:
 - Method of Measuring Height: Standing Height, Sitting Height.
 - Method of measuring Circumference: Arm, Waist, Hip, Thigh.
 - Method of Measuring Skin folds: Triceps, Sub scapular, Suprailiac
 - Foot measurement

- 9. Aerobic Capacity 1.5 Mile Run test for college age males and females.
- 10. Anaerobic Capacity Margaria-Kalamen test.

11. Physical Fitness

- AAHPERD Youth Fitness test,
- Roger's physical fitness Index.

12. Skill tests

- Badminton: Miller Wall Volley Test.
- Basketball: Johnson Basketball Test,
- Cricket: Sutcliff Cricket test.
- **Hockey:** Friedel Field Hockey Test
- Volleyball: Russel Lange Volleyball Test,
- Football: Johnson Soccer Test,
- **Tennis**: Dyer Tennis Test.
- Handball: Cornish Handball Test.

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

(ANY ONE)

Number of credits: 2 Number of hours: 2 Marks: Internal - 30 External - 70

Objectives:

- Develop skills and fitness specific to a particular sport.
- Appreciate and be able to execute strategic play.
- Participate at a level appropriate to one's developmental stage.
- Share in the planning and administration of sport experience.
- Provide reasonable leadership.
- Work effectively within a group toward common goals
- Appreciate the rituals and conventions that give particular sports their unique meanings.
- Develop the capacity to make reasoned decisions about sport issues.
- Develop and apply knowledge about umpiring, refereeing, and training.

WRESTLING/BADMINTON / FOOTBALL

- Basic skills
- Advanced skills
- Teaching progression of different skills
- Drills for each of the skills
- Biomechanical analysis of the skills
- Specific fitness drills

SPECIALISATION RECORD

UNIT 1: History and development of the Game/Sport

- Origin of the Game
- Growth and development of the Game in India.
- Tournaments and awards

UNIT 2: Skills and Techniques

- Fundamental Skills
- Advanced skills
- Training drills

UNIT 3: Strategies and Tactics

- Training for tactics
- Training plan for a period of six weeks and twelve weeks at different levels (High school, college and university)

UNIT 4: Officiating

- Rules and Regulations
- System of officiating

UNIT 5: Layout and construction and maintenance of playfield/courts.

UNIT 6: Organization, Administration and managerial set up for conducting tournament /competition

UNIT 7: Biomechanics and Energy systems

- Biomechanical principles of the game/sport
- Energy systems involved in the games and fitness programme specific to the game

UNIT 8: Injuries and Nutrition

- Game/Sport related injuries Prevention, treatment and rehabilitation.
- Nutrition related to the game Off season, and pre, during and post competition

^{*}The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting.

Semester II Theory Course

MDH 451 - FITNESS, WELLNESS AND LIFE STYLE MANAGEMENT.

Number of credits: 3 Number of hours: 3 Marks: Internal - 30 External - 70

Objectives:

- To development competencies, skill and knowledge required for the fitness and life style management
- TO understand the relationship between fitness and wellness
- To acquire the knowledge regarding healthy lifestyle approach.
- To gain knowledge regarding various aspects and its practical implications fitness lifestyle management

UNIT I – Fitness and Wellness

- Concept of Fitness Definition and meaning of Fitness, Different Kinds of Fitness -Physical Fitness, Skill Related and Health Related Physical Fitness, Relationship of fitness and health
- Wellness revolution: Basic concept of wellness, Role of various factors in wellness, Living a healthy life style; components of wellness, Physical fitness and wellness, Health benefits of Exercise. Reaching wellness through life style management. Exercise prescription.
- Meaning of active life style, Hypokinetic Diseases Diabetes, Hypertension, Atherosclerosis, Arthritis.

UNIT – II Health Related Fitness

- Meaning of Health, Health related fitness components: Cardio Vascular Fitness,
 Muscular Endurance, strength, flexibility and Body composition, benefits of health
 related fitness. Exercise protocols for the health related fitness components.
- Concepts and components of body weight, Assessment of body composition.
- Over weight and Obesity and their health implications. Factors contributing to excess body fat. Approaches to overcome weight problem.

UNIT III – Nutrition

- Basic Concepts in nutrition; Nutritional requirements and components of a healthy diet. Nutritional Guidelines. Nutritional Planning, Balanced diet.
- Nutrition: Bases for human performance-Carbohydrates, Fats and Proteins.
 Recommended intake for Normal persons and exercising individuals. Vitamins,
 Minerals and Water. Osteoporosis and Calcium, Minerals and performance.
- Optimal nutrition for exercise, Energy value of different important foods, Food Pyramid, fluid replacement before, during and after exercise.

UNIT IV – Aging, Stress and Health Behavior.

- Fitness and Aging: Aging and cardiovascular health; Risk factors for cardio vascular disease, Forms of cardio vascular disease. Exercise and aging. Meeting the challenges of aging.
- Stress-meaning and types of stress, Physical and mental stress-Harmful effects of overtraining and excessive exercise on health, -mental stress and painful effects of mental stress on health. Anxiety, Depression, insomnia, Compulsive obsessive behaviors, Stress relief through exercise and stress management protocols.
- Health behavior, Self efficacy and health behavior, Behavioral modification for wellness, Social support and health of an individual, Life style and other related aspects of activity during childhood. Facts on childhood obesity and activity.
- Brief concept of safety education and first aid; principles of mental hygiene; effects of smoking, alcoholism and drugs; Behavioral modifications.

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Semester II Theory Course

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

- A need for promoting the timely collection and publication of good quality statistical data
- A need for maintaining continuity and comparability in the data produced.
- The safeguarding of confidentiality of individual returns, impartiality and objectivity as prerequisites for reliable statistics.
- The application of the most optimal, both international, statistical principles, methods and proceedings.
- To use population mean, as an estimate of the sample mean,
- To make inferences about a population based on information we get from a sample taken from the population
- To make inferences about a sample with a high degree of reliability

UNIT I – Introduction, Data Classification, Tabulation and Measures of Central Tendency

- Meaning and Definition of Statistics. Function, need and importance of Statistics.
- Types of Statistics. Meaning of the terms, Population, Sample, Data, types of data. Variables; Discrete, Continuous. Parametric and non-parametric statistics.
- Meaning, uses and construction of frequency table.
- Meaning, Purpose, Calculation and advantages of Measures of central tendency Mean, median and mode.

UNIT II: Measures of Dispersions and Scales

- Meaning, Purpose, Calculation and advances of Range, Quartile, Deviation, Mean Deviation, Standard Deviation, Probable Error. Meaning, Purpose, Calculation and advantages of scoring scales; Sigma scale, Z Scale, Hull scale
- Mean Percentile Ranking, Computation of Percentile Ranking.

UNIT III: Probability Distributions and Graphs

- Normal Curve. Meaning of probability- Principles of normal curve Properties of normal curve.
- Divergence from normality Skewness and Kurtosis.
- Graphical Representation in Statistics; Line diagram, Bar diagram, Histogram, Frequency Polygon, Ogive Curve.

UNIT IV: Inferential and Comparative Statistics

• Tests of significance; Independent "t" test, Dependent "t" test – chi – square test, level of confidence and interpretation of data.

- Meaning of correlation co-efficient of correlation calculation of co-efficient of correlation by the product moment method and rank difference method.
- Concept of ANOVA and ANCOVA.
- Factorial Analysis, SPSS System.

Note: It is recommended that the theory topics be accompanied with practical, based on computer software of statistics.

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Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, New Delhi Rothstain A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc

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Semester II Theory Course

MDH 453: PHYSIOLOGY OF EXERCISE

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should understand

- The meaning and scope of sports physiology in physical education.
- The skeletal and muscular system and their role in improving performance.
- The changes in cardio vascular, respiratory and hormonal system during exercise.
- The effect of exercise on various physiological systems.
- Exercise prescription for special conditions such as hypertension, diabetes, obesity etc.
- The changes during exercise in various environmental conditions.
- The physiological differences in women and their performances.

Unit I: Meaning of Physiology of Exercise and Musculoskeletal System

- Meaning, Scope and Uses of Exercise Physiology in Physical Education and Sports.
- Skeletal system, structure of bone and effect of exercise on skeletal system.
- Muscle physiology Types of muscle fibers, types of muscular contraction, gross and microscopic structure of muscle, sliding filament theory of muscular contraction.

Unit II: Cardiovascular and Pulmonary Response to Exercise

- Cardio vascular adjustments to exercise Description of Cardio vascular system, Cardiac output and factors affecting cardiac output, Heart rate and Stroke volume and their regulation, changes in cardiac output during exercise, cardiac cycle.
- Pulmonary function and gas exchange Meaning and types of respiration, process of gas exchange and transportation of oxygen and carbon dioxide in blood, Oxygen disassociation curve, Respiratory exchange ratio, Minute ventilation, changes in minute ventilation during exercise, Lung volumes and capacities, VO2 max.

Unit III: Bioenergetics and Development of Motor Abilities

- Bioenergetics and exercise metabolism ATP CP, Lactate (Anaerobic) and Oxidative (aerobic), Anaerobic threshold, Oxygen debt, Metabolism of carbohydrates, fats and proteins for energy.
- Energy requirements of various activities long activities like marathon, long duration games like football, hockey, basketball etc., power games like volleyball, Badminton etc. Caloric value of food, glycemic index.
- Hormonal response to exercise, effects of exercise on muscular system, nervous system, cardiovascular system and respiratory system,
- Physiological basis of developing strength, endurance, speed, flexibility.

Unit IV: Physiological Considerations and Exercise Benefits

- Physiological consideration in female performance in sports, Physiological differences between males and females and their effect on female performers.
- Environmental considerations during exercise Mechanism of thermo regulation
- Hot, Humid and cold climate physiological changes and adaptation, heat and cold related illness
- Exercising at high altitude physiological changes and adaptation.
- Ergogenic aids Meaning, classification and their effects on performance and health.
- Health benefits of training and exercise, exercise prescription for obesity, diabetes and hypertension.

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Semester II Theory Courses

MDS 454- SPORTS JOURNALISM AND MASS MEDIA (Elective)

Number of credits: 3 Number of hours: 3 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should understand.

- Meaning, scope and changing trends of journalism in sports.
- Role of journalism in sports promotion and vice-versa and Media.
- To develop professional competencies, skills and knowledge regarding sports journalism.
- To acquire the writing skills in the field of sports.
- To gain knowledge regarding organizations and presentation skills in sports media.
- To develop and understanding about research processes and future direction in sports journalism.

UNIT I: An Introduction and role of sports journalism

- Meaning and Definition of sports Journalism.
- Role of Journalism in the Field of Physical Education and sports.
- Ethics of Journalism-Canons of journalism-Sports Ethics and Sportsmanship— Reporting Sports Events.
- Role of Advertisement in Journalism, Sports organization and sports journalism.
- Sports journalism awards and World famous sports journalist.
- Characteristics of news: importance of human factors in news. Writing the news story lead and body reporting various games.

UNIT II: Sports Bulletin and Ethics of Sports Writing

- Concept of Sports Bulletin: Journalism and sports education.
- Structure of sports bulletin.
- Compiling a bulletin.
- Types of bulletin–National and International Sports News Agencies
- Sports as an integral part of Physical Education General news reporting and sports reporting.
- Writing a news story and tips for news writing,
- Structure for your article,
- Writing news releases, the dangers of sports journalism.

UNIT III: Mass Media

- Introduction of Mass Media.
- Organization of Press Meet. Purpose of Mass Media for the propagation of sports communication.

- In daily newspapers general magazines and specialized sports magazines. Sports on radio, television and Internet or Web= Running commentary on the radio Sports expert's comments.
- Women and media.
- Sports Photography: Equipment- Editing Publishing.

UNIT IV: Report Writing on Sports and Journalism and Journalistic techniques

- Qualifications, Duties and Responsibilities of an editor.
- Preparing report of an Annual Sports Meet for Publication in Newspaper.
- Methods of editing a Sports report, Picture section and editing, Sports page make up.
- Sports organization and Sports Journalism—General news reporting and sports reporting.
- Evaluation of Reported News.
- Interview with elite Player and Coach.
- Types of sports features, Exclusive pictures, freelance writing in sports.

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Semester II Theory Courses

MDH 455: SPORTS MANAGEMENT (Elective)

Number of credits: 3 Number of hours: 3 Marks: Internal - 30 External - 70

Objectives:

- To understand the importance of sport management of physical education sports
- To gain the knowledge regarding planning and personal, facility. Budget .management. Sports physical education
- To understand the various aspects curriculum designing in professional preparation Physical education
- To gain the knowledge regarding HRM, Scientific purchasing. Job analysis and its process, sports communication. Health and fitness industry in sports

Unit-I: Management

Meaning and Function, The skills of management, The universally nature of the management process, Management and Administration, principles and Theories of Management. Marketing agency function, sports agency.

Classical principles, Bureaucracy; Bureaucracy in Democracy and in sports organization. Open system perspectives. The constitution of national sports organization, office holders of an organization and their function meeting, tournament organization structure and athletic meet. Modern Recreation movement, orientation and organizational culture.

Unit-II: Human Resource Management in Sports and Management of Finance, Facilities and Material:

Definition and aspect of HRM, job analysis and its process. Human resource is planning, Requirement, Manpower planning, Personal Management and its principles, Appraisals & Public Relation in physical education. Sales in the sports setting .sports agency firms. Sports Broadcasting. Sports communication. Health and fitness industry

Financial administration in sports and physical education, source funds in sports. Budgeting is sports and games, purpose and principal of budgeting material; improvisation and standardization of sports equipments and materials. Scientific purchasing. Storekeeping, inventory control and value analysis Facility (outdoor &indoor) planning, constructions and maintenance of sports facilities

Unit-III: Management of performance, Records and registers.

Evaluations and its techniques in physical education. Sports competition and its Systems, Training structure and performance, Ethics of sports Records ®isters: Maintenance of attendance. Stock, cash. Register,: physical efficiency ,medical examination record ,Care and maintenances .Event managements function .planning for new event

Unit IV: Sports Marketing

Meaning and definition of marketing and Sport Marketing, Strategic Market Management, Target Markets: Segmentation and Evaluation, Factors involved in the marketing of sport, Planning the marketing mix, The sports product, Price, Promotion, Place, Marketing, Marketing Plan outline. Applying the marketing concept, Sport marketers and their products, Consumers, Marketing challenges and opportunities, External Stakeholders.

Reference:

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MDH 456: TRACK AND FIELD II: JUMPING EVENTS

Number of credits: 3 Number of hours: 6 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should be able to

- Perform various jumps.
- Teach students following the progression of teaching various jumps
- Identify the specific fitness qualities required for each event and give training accordingly.
- Make proper markings and allot duties for officiating of the jumps.
- Prevent injuries and give first aid treatment to them if necessary.

Long Jump, Triple Jump, High Jump, Pole Vault

- Run up, Take off, Technique in the air, Landing of long jump, high jump and pole vault.
- Different techniques of Long Jump, High Jump
- Teaching stages and specific drills.

SPECIALISATION RECORD

UNIT 1: History and development of the jumping events

- Origin of the event
- Growth and development of the event

UNIT 2: Skills and Techniques

- Skills and techniques of Long jump
- Skills and techniques of High jump
- Skills and techniques of Triple jump
- Skills and techniques of Pole Vault
- Training drills and progression of teaching skills

UNIT 3: Fitness training

- Energy system involved in the event
- Training to develop the fitness parameters involved in the event
- Training plan of six weeks for jumps

UNIT 4: Rules and Regulations

- Officials required for the jumping events
- Rules pertaining to jumping events.

UNIT 5: Layout and construction and maintenance of jumping events' arena.

Method of Marking

UNIT 6: Organization, Administration and managerial set up for conducting jumping events.

UNIT 7: Biomechanical principles of jumping events

- Long jump Hang style and hitch kick style
- High jump Straddle style and Fosbury flop style
- Triple jump
- Pole vault

UNIT 8: Injuries and Nutrition

- Event related injuries, prevention, treatment and rehabilitation.
- Nutrition specific to the event

*The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting

MDH 457: LABORATORY PRACTICAL – PHYSIOLOGY OF EXERCISE

Number of credits: 2 Number of hours: 2 Marks: Internal - 30 External - 70

Objectives:

- Test the fitness abilities such as aerobic and anaerobic capacity, flexibility, maximal strength.
- Measure the body composition and interpret the measurements
- Measure physiological parameters such as lung volume testing, lactate testing and evaluate the results.
- Prescribe fitness activities based on maximal and target heart rate and other physiological parameters.
- Acquaint oneself with the physiological testing methodology and handle the scientific instruments required for the same.

I. Blood Pressure Measurement

II. Metabolic Rate Determinants

Total Energy Expenditure and Resting Metabolic Rate Oxygen deficit and EPOC evaluation

III. Sub maximal testing

Measurement of Heart Rate, Target Heart rate, Rate of Perceived Exertion (RPE) Sub maximal Treadmill test Sub maximal Cycle Ergometer test

IV. Aerobic Field test

Cooper 12 min run/walk test 1 mile Rockport Fitness walking test

V. Maximal Oxygen consumption

Graded treadmill Vo2 max test Cycle Ergometer Vo2 max test Blood Lactate threshold assessment

VI. Musculoskeletal fitness measurement

1 RM test – Bench press, Leg Press etc., Isometric testing

VII. Muscular Endurance

YMCA Bench Press protocol, Muscular Endurance of the Trunk

VIII. Anaerobic tests

Sprinting – for horizontal power

Jumping – for vertical power

The Margaria-Kalamen Stair climb test for determining anaerobic power

IX. Body Composition

Skinfold, BMI and circumference

X. Pulmonary function tests

Lung volumes and capacities, Spirometer tests

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

Semester II Practical Course

MDH 458: Semester III Practical Course

MDH 458: (A) COACHING LESSONS OF TRACK AND FIELD AND (B) COACHING LESSONS OF GAME SPECIALISATION

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should understand

- The general coaching principles of sports and games
- Specific coaching principles of track and field and game specialization.
- Various drills for progression of learning skills from simple to complex.
- Management of trainees while coaching a game/event.
- Knowledge about various equipment required for the teaching of a particular game/event
- Periodisation of coaching according to the purpose and objectives

(A) COACHING LESSONS OF TRACK AND FIELD

(B)

The students of M.P.Ed – III Semester need to develop proficiency in taking coaching lesson on above mentioned selected discipline. In view of this, the students shall be provided with advance training and coaching in selected discipline. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class, they are going to handle at school and college level.

Each student teacher is expected to take at least fifteen lessons in track and field for the BPEd students or high school students as decided by the departmental council at the end of which a competition will be conducted among the trainees of the MPEd teachers. For this purpose a group of three MPEd students in each coaching team may be made to coach track, jumps and throws. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these coaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

(B) COACHING LESSONS OF GAME SPECIALISATION

The students of M.P.Ed – III Semester need to be develop proficiency in taking coaching lesson in selected game discipline. In view of this, the students shall be provided with advance training and coaching in selected discipline. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class they are going to handle at school and college level.

Each student teacher is expected to visit the schools and take coaching lessons on games allotted to them for 15 days at the end of which there will be a competition among the participating schools in the respective games. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these coaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

At the end of the semester pedagogy there will be an external exam, in which the teacher trainee (MPEd student) will have to demonstrate his coaching abilities in one track and field event as well as one game.

Semester II Practical Course

MDH 459: SPECIALISATION – KHO- KHO / VOLLEYBALL / CRICKET (ANY ONE)

Number of credits: 2 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

- Develop skills and fitness specific to a particular sport.
- Appreciate and be able to execute strategic play.
- Participate at a level appropriate to one's developmental stage.
- Share in the planning and administration of sport experience.
- Provide reasonable leadership.
- Work effectively within a group toward common goals.
- Appreciate the rituals and conventions that give particular sports their unique meanings.
- Develop the capacity to make reasoned decisions about sport issues.
- Develop and apply knowledge about umpiring, refereeing, and training.
- Basic skills
- Advanced skills
- Teaching progression of different skills
- Drills for each of the skills
- Biomechanical analysis of the skills
- Specific fitness drills

SPECIALISATION RECORD

UNIT 1: History and development of the Game/Sport

- Origin of the Game
- Growth and development of the Game in India.
- Tournaments and awards

UNIT 2: Skills and Techniques

- Fundamental Skills
- Advanced skills
- Training drills

UNIT 3: Strategies and Tactics

- Training for tactics
- Training plan for a period of six weeks and twelve weeks at different levels (High school, college and university)

UNIT 4: Officiating

- Rules and Regulations
- System of officiating

UNIT 5: Layout and construction and maintenance of

playfield/courts UNIT 6: Organization, Administration and

managerial set up for conducting tournament /competition

UNIT 7: Biomechanics and Energy systems

- Biomechanical principles of the game/sport
- Energy systems involved in the games and fitness programme specific to the game

UNIT 8: Injuries and Nutrition

- Game/Sport related injuries Prevention, treatment and rehabilitation.
- Nutrition related to the game Off season, and pre, during and post competition

*The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting

Semester III Theory Course

MDH501: CONTEMPORARY TRENDS IN PHYSICAL EDUCATION AND SPORTS

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should understand

- The meaning of different kinds of fitness and their purposes
- The methods of developing the different kinds of fitness and their benefits
- Various psychological parameters and their effects on sports performance and health.
- Different types of sports injuries and their rehabilitation techniques
- Basic aspects of yoga and the application of yoga in physical education and sports
- Historical significance and development of imports sports events at the international level.

Unit I Fitness Development

- Aerobic development: Meaning and methods
- Anaerobic development: Meaning and methods
- Flexibility: Meaning, methods of training
- Methods and means of training:- Continuous method, Interval method, Repetition method, Circuit training, Fartlek training, Plyometric, Resistance training weight training, body weight exercises, Hill training, sand training, resistance bands.
- Current trends in means and methods of training:- Pilates, Swiss ball, Aerobic dance Zumba, Step Aerobics, Kick boxing aerobics, water aerobics; Cross fitness, Power yoga

Unit II – Psychological Applications in Sports and Sports Injuries

- Role of anxiety in Sports performance
- Motivation Types and effect on sports performance
- Psychological preparation for sports competition Auto suggestions, progressive relaxation, Visual imagery, pep talk
- Sports injuries, first aid and therapeutic interventions—Cardio pulmonary emergenices, Soft tissue injuries, hard tissue injuries, Therapeutic modalities—Cryotherapy, thermotherapy, electro therapy and massage

Unit III - Applications of Yoga in Physical Education and Sport

- Yoga for Health
- Meaning of yoga, Types of yoga,
- Ashtanga yoga
- Yogasanas, Mudras,kriyas and Meditation
- Pranayama
- Yoga in physical education and sports.

Unit IV Historical and current perspectives in international sports events

- Olympics Ancient Olympics Origin and History of Ancient Olympics, Olympic flame, Events at ancient olympics
- **Modern Olympics** Origin, Olympic ideals, Olympic flag, Olympic flame and torch, Olympic motto, Olympic anthem, Olympic movement, IOC, Indian participation and performance at Olympics
- Asian Games Origin and history of Asian Games, Olympic Council of Asia, Asian Games Organising Committee (AGOC), India at Asian Games.
- Commonwealth Games History and development, Commonwealth Games Federation, Queen's Baton Relay, Countries in CGF, India at Commonwealth games

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Semester III Theory Course

MDH502: SPORTS PSYCHOLOGY

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should be able to

- Understand the profile of psychological requirements of an applied sports psychology
- Psychological aspects and methods for effective motor learning.
- Psychological training for optimizing one's mental state, to cope with stress and to increase psychological load tolerance.
- How to psychologically work with difficult athletes and injuries in sports.
- Successful coaching in individual sports and team sports.
- Means and methods of an event-specific, psychological preparation for competitions.
- Psychological training methods in sport

Unit I – Introduction

- Meaning, Definition, History, Need and Importance of Sports Psychology.
- Present Status of Sports Psychology in India.
- Motor Learning: Basic Considerations in Motor Learning Motor Perception Factors Affecting Perception Perceptual Mechanism.
- Personality: Meaning, Definition, Structure Measuring Personality Traits. Effects of Personality on Sports Performance.

UNIT II - Motivation

- Meaning and Definition, Types of Motivation: Intrinsic, Extrinsic. Achievement Motivation: Meaning, Measuring of Achievement Motivation.
- Anxiety: Meaning and Definition, Nature, Causes, Method of Measuring Anxiety.
 Competitive Anxiety and Sports Performance.
- Stress: Meaning and Definition, Causes. Stress and Sports Performance.
- Aggression: Meaning and Definition, Method of Measurement. Aggression and Sports Performance.
- Self-Concept: Meaning and Definition, Method of Measurement.

UNIT III – Goal Setting

- Meaning and Definition, Process of Goal Setting in Physical Education and Sports.
- Relaxation: Meaning and Definition, types and methods of psychological relaxation.
- Psychological Tests: Types of Psychological Test: Instrument based tests: Pass-along test – Tachistoscope – Reaction timer – Finger dexterity board – Depth perception box – Kinesthesiometer board. Questionnaire: Sports Achievement Motivation, Sports Competition Anxiety.

UNIT V – Psychology of Competition and Group Cohesion

- Group: Definition and Meaning, Group Size, Groups on Composition, Group Cohesion, Group Interaction, Group Dynamics.
- Competition psychology Psychological factors affecting sports performance, psychological preparation for sports pep talks, bio-feedback techniques, self suggestions, Progressive relaxation techniques, Visualisation and imagery

Practical: At least five experiments related to the topics listed in the Units above should be conducted by the students in laboratory.

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Semester III Theory Course

MDS503: SPORTS SPONSORSHIP

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should

- Increase his/her competence to seize the new employment opportunities which are likely to generate.
- Be able to undertake research in sponsorship and sports marketing field.
- Become aware about marketing systems followed in the field of sports.
- Enlightened about the new hi-tech technologies and equipments/gadgets available in market.
- Be trained with the requisite knowledge of sport sponsorship and marketing.
- Be enlightened regarding the avenues available in the field of Sports sponsorship and Sports Marketing such as Facility Directors, Market researchers, Sports marketing agents, Corporate sales agents etc.

Unit I: Preparing for Sponsors

Meaning and definition of sponsorship, Philosophical bases for sponsorship, Examining sponsorship, objectives of Sponsorship spending, Sponsorship spending in India, commercial sponsor and philanthropist, sponsorship growth, Influencing factors on sponsorship growth. Defining sponsor opportunities.

Unit II: Leveraging Sponsorships.

Consumer sales overlays, Added-value offers, Self liquidators, Trade extensions, Retailer incentives, Cross-promotions with cosponsors, Media Tie-ins, Multidimensional programmes, working with sponsorship agencies, The role of sponsorship agencies, Sponsors and Sponsorship agencies, Properties of sponsorship agencies.

Unit III: The strategy of Sports Sponsorship

Sponsorship options, sponsorship models, sponsorship agreement, Implementation, Controversies, The elusive event-pricing formula, Face to face: Sponsorship sales meetings, The perfect proposal, Suggested proposal layout, Sponsor service.

Unit IV: Trends in Sports sponsorship

People and pay, title sponsorship, Cause related marketing, Impact targets, Budgets, Benefits, Proposals and pricing, Contact and follow-up, Evaluation and measurement, Research and prospecting, General data, State of the art, Predictions.

Evaluation: Measuring Sponsorship Effectiveness

Need, personnel involved, content, criteria and process of evaluation, Musts in measuring sponsorships, evaluation and Measurement methods.

References:

- 1. Ukman Lesa (1996) <u>IEG's Complete Guide to Sponsorship</u>, IEG Inc. Publications, North Lasalle, Chicago.
- 2. Park house Bonnie L (2001) <u>The Management of Sport</u>, Published by McGrraw-Hill Companies. Inc. New York.
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- 5. Bhattacharya Sukumar (1972) <u>Indian Income Tax: Law and Practice, Mahabharatha Publishers, Calcutta.</u>

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- 9. Panda Snehalatha (1989) <u>Financial Administration and Personal Management in Public Enterprises</u>, Patel Publications, New Delhi.
- 10. Mason G James and Paul Jim (1993) <u>Modern Sports Administration</u>, Prentice-hall Inc. Englewood Cliffs, New Jercy.
- 11. Be Successful at Sports Sponsorship: Advisory Pack by Scottish Sports Council (2000)
- 12. Commercial sponsorship of disability sport by Sports match (2000)
- 13. Football Sponsorship and Commerce: An Analysis of Sponsorship and Commercial Opportunities in Football by Lovella Miles and Simon Rines.

Semester III Theory Course

MDS504: ADAPTIVE AND CORRECTIVE PHYSICAL EDUCATION (ELECTIVE)

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

- Participate regularly in developmentally age-appropriate movement and motor skills.
- Develop a healthy level of flexibility, balance, muscular strength and endurance, body composition, and cardio-respiratory endurance.
- Develop competency in movement and motor skills.
- Learn game rules and strategies and demonstrate their use in game settings.
- Demonstrate appropriate social skills in a physical activity setting.
- Understand the benefits of regular physical activity.
- The Adapted Physical Education program also emphasizes the importance of physical activity and personal fitness.

Unit I: Meaning of Adaptive and corrective Physical Education.

- 1. Meaning of adapted Physical Education. Brief history of Adapted Physical Education. Functions of Adapted Physical Education. Objectives of Adapted programme.
- b) Individuals with Disabilities Education Act (IDEA) of USA. History of adapted sports. Current status of Adapted Physical Education.

Unit II: HUMAN RESOURCES:

- a) Director of Physical Education and Athletics, Adapted Physical Educator or Coordinator, Regular Physical Educator, Nurse, Physician. Qualifications of the Adapted Physical Education teacher.
- b) Attributes of the Adapted Physical Education Teacher. Role of Physical Education Teacher in catering to the Physical activity needs of the disabled. The Remedial therapist.

Unit III: NATURE OF DISABILITIES:

a) Low Physical Fitness:- Nature, Causes, Components, Tests, Development of Physical Fitness. Inefficient Body mechanics:- Values, Causes, Testing, Programme to improve Body mechanics. Nutritional disturbances:- Nature, Associated Problems, Programme.

Visual impairments:- Causes, Testing, Programme.

Auditory impairments:- Causes, Programme.

b) Cerebral Palsy:- Nature, Characteristics, Classification of Neuromuscular disability, Planning the Programme.

Orthopaedic Handicaps:- Nature, Programme Planning.

Cardiopathic Conditions:- Nature, Programme.

Convalescence:- Nature, Programme.

Postural deviations:- Exercise Programme to improve posture

Unit IV: MOVEMENT:

- a) Active Movement I. Voluntary Movement:-
- a) Free exercise-classification technique, effects
- b) Assisted exercise- Technique, effects
- c) Assisted-Resisted exercise-Technique, effects. II. Involuntary Movement:- Reflex

Movement, effects b) Passive Movement:- a) Relaxed passive Movement. b) Passive manual mobilization techniques. Definitions, Principles, Effects and Uses

Possible treatments with Physical therapy and remedial exercises for I. Sprains ii) Contusions iii) Luxations iv) Fractures v) Muscle pull & Tear vi) Cramps vii) Inflamed muscle viii) Periostitis ix) Strained and pulled Tendons x) Torn Tendon.

Passive Treatments:

- i) Massage:- Basic Techniques Stroking (Effleurage)- Kneading (Petrissage) Rubbing (Friction)-Hacking, Thumping and Slapping Vibration and Shaking. Conditions for application of massage.
- ii) Uses of heat, Dry heat and moist heat.
- iii) Uses of Cold
- iv) Hydrotherapy and Electrotherapy

Active Treatments:

- i) Strengthening
- ii) Proprioceptive Neuromuscular facilitation (PNF)
- iii) Loosening
- iv) Stretching
- v) Exercises in water

References:

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- 2. Development and Adapted Physical Education. Clarke Harrison H. and Clarke David H. Englewood Cliffs N.J. Prentic Hall, inc., 1963.
- 3. Adapted Physical Education Fait Holis F. Phiadelphia W.B. Saunders Co., 1962.
- 4. Adapted Physical Education and Recreation, Auxter David, Pyfer Jean, Huetting carol, Mosby, Year Book inc., 1993.
- 5. Physical Therapy for Sports. Eitner Doris, Meissner Buty, Ork Helmut, W.B. Saunders Company, Philadelphia 1982.
- 6. The Principles of Exercise Therapy Gardiner Dena M. C.B.S. Publishers and Distributors, Delhi, 1985.
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Semester III Theory Course

MDS505: SPORTS MEDICINE (ELECTIVE)

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should understand

- The concept of sports medicine and its significance in sports performance.
- The development of the profession of sports medicine and its regulatory bodies
- Injuries occurring in the upper extremities and their rehabilitation

- Injuries occurring in the lower extremities and their rehabilitation
- The techniques and benefits of massage

UNIT I – Sports Medicine and Therapeutic Exercise

- Meaning, definition and importance of Sports Medicine.
- The development, objectives and activities of the International Federation of Sports Medicine. (FIMS)
- Definition and Principles of therapeutic exercises.
- Coordination exercise, Balance training exercise, Strengthening exercise, Mobilization exercise, Gait training, Gym ball exercise Injuries: acute, sub-acute, chronic. Advantages and Disadvantages of PRICE, PRINCE therapy, Aquatic therapy.
- The development, objectives and activities of the IOC Medical commission.

UNIT II – Basic Rehabilitation and Spine Injuries and Exercise

- Basic Rehabilitation: Strapping/Taping: 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.
- 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.

UNIT III – Upper Extremity Injuries, Lower extremity Injuries and Exercise

- 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.

UnitIV-Massage and Doping

- 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.
- .Doping Classifications, Clinical aspects of doping, Dope testing

Practicals: Lab. Practicals and visit to Physiotherapy Centre to observe treatment procedure of sports injuries; data collection of sports injury incidences etc. should be planned internally.

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- 4. Pande. (1998). Sports Medicine. New delhi: KhelShitya Kendra
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Semester III Practical Course

MDH506: TRACK AND FIELD III: THROWING EVENTS

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should understand

- Perform throwing events.
- Perform throwing techniques.
- Understand the different methods of throwing styles, tactics and perform the same.

Styles and techniques of

- Shot Put
- Discus Throw
- Javelin Throw
- Hammer Throw

SPECIALISATION RECORD

UNIT 1: History and development of the throwing events.

- Origin of the event
- Growth and development of the event

UNIT 2: Skills and Techniques

- Shot Put styles and techniques
- Discus throw styles and techniques
- Javelin throw styles and techniques
- Hammer throw technique
- Teaching progressions of each event and training drills

UNIT 3: Fitness training for each of the skills

- Energy system involved in the skill
- Training to develop the fitness parameters involved in the skill
- Training plan of six weeks for throws
 - -Training for tactics

UNIT 4: Rules and Regulations

- Officials required for the throwing events
- Rules pertaining to throwing events and each of the throws

UNIT 5: Layout and construction and maintenance of throwing arena.

UNIT 6: Organization, Administration and managerial set up for conducting throwing events.

UNIT 7: Biomechanical principles of the throwing events

UNIT 8: Injuries and Nutrition

- Event related injuries, prevention, treatment and rehabilitation.
- Nutrition specific to the event

*The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded in consultation with the guide.

MDH507: LABORATORY PRACTICAL – SPORTS PSYCHOLOGY

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should understand

- To understand how psychological factors influence physical performance;
- To understand how participation in sport affects psychological development.
- The application of this understanding to real life cases is the essence of sport psychology.

Unit I

- 1. Aptitude tests
- 2. Interest inventories/schedules
- 3. Bell Adjustment inventory
- 4. Achievement motivation Tests
- 5. Personality Tests self esteem, self confidence, self concept, self and ideal discrepancy.

Unit II

- 1. Stressful life –events scale
- 2. Anxiety
- 3. Self-esteem
- 4. Extraversion and neuroticism personality assessment.
- 5. Well-being Questionnaire.

Unit III

- 1. Sociometry
- 2. Measuring styles of leadership behaviour
- 3. Attitude measurement
- 4. Level of aspiration
- 5. Emotional Intelligence

Unit IV

- 1. Muller Lyer Illusion
- 2. Maze Learning
- 3. Self confidence test
- 4. Imagery test
- 5. Self talk

Unit V

- 1. Psychological reactions to sports injuries
- 2. Reaction ability tests
- 3. Anxiety tests
- 4. Depth perception test
- 5. Cognitive ability test

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

Semester III Practical Course

MDH508: INTERNSHIP

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should understand

Gain experience in the Management of college sports administration.

Gain experience in the Conduct of College sports activities.

Gain experience in the coaching of college teams in various games.

Experience the functioning of a physical education director in the college department.

The students of M.P.Ed – III Semester need to develop proficiency in managing the college sports activities, coach teams and manage the teams during inter collegiate tournaments. Therefore with this view in mind they are required to undergo internship during the third semester. The procedures for internship are as follows:

1. Two students each will be deputed to degree and PU colleges in and around Mangalore University area jurisdiction for 4 days in a week i.e. Monday to Thursday. 2. They are required to mark their attendance for the period of internship duly certified by the physical education director and principal of the concerned college. 3. At the end of the internship they have to prepare a report consisting of chapter like - Introduction to the college, Profile of the Department, Facilities, Programmes, Detailed programme of coaching and programmes conducted in the college, and recommendations to improve the college programmes.4. The exam will be conducted by one external and internal examiner considering the report as well as practical performance in coaching.

Semester III Practical Course

MDS509: SPECIALISATION – BADMINTON/ BASKETBALL / KABADDI (ANY ONE)

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

- Develop skills and fitness specific to a particular sport.
- Appreciate and be able to execute strategic play.
- Participate at a level appropriate to one's developmental stage.
- Share in the planning and administration of sport experience.
- Provide reasonable leadership.
- Work effectively within a group toward common goals
- Appreciate the rituals and conventions that give particular sports their unique meanings.
- Develop the capacity to make reasoned decisions about sport issues.
- Develop and apply knowledge about umpiring, refereeing, and training.
- Basic skills
- Advanced skills
- Teaching progression of different skills
- Drills for each of the skills
- Biomechanical analysis of the skills
- Specific fitness drills

SPECIALISATION RECORD

UNIT 1: History and development of the Game/Sport

- Origin of the Game
- Growth and development of the Game in India.
- Tournaments and awards

UNIT 2: Skills and Techniques

- Fundamental Skills
- Advanced skills
- Training drills

UNIT 3: Strategies and Tactics

- Training for tactics
- Training plan for a period of six weeks and twelve weeks at different levels (High school, college and university)

UNIT 4: Officiating

- Rules and Regulations
- System of officiating

UNIT 5: Layout and construction and maintenance of playfield/courts

UNIT 6: Organization, Administration and managerial set up for conducting tournament /competition

UNIT 7: Biomechanics and Energy systems

- Biomechanical principles of the game/sport
- Energy systems involved in the games and fitness programme specific to the game

UNIT 8: Injuries and Nutrition

- Game/Sport related injuries Prevention, treatment and rehabilitation.
- Nutrition related to the game Off season, and pre, during and post competition

^{*}The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded in consultation with the guide.

MDH551: DISSERTATION/PROJECT

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

On completion of this course the students will be able to

- Formulating research questions with the help of the supervisor, and elaborating the research.
- Acquiring information independently and assessing its relevance for answering the research questions.
- Acquiring attitude to work on scientific research in a team.
- Learning to communicate in a scientific language through collaboration with fellow students and researchers.
- Following up and analysing developments in the chosen area, through training and by making contact with the current research in one of the areas.
- Using adequate experimental or theoretical methods and techniques.
- Critically analysing the results and their interpretation.
- Reporting and presenting the original results in an orderly way and placing the open questions in the right perspective. Linking techniques and results from literature as well as actual research and future research lines with the research.
- 1. A candidate shall have dissertation for M.P.Ed. IV Semester and must submit his/her Synopsis and get it approved by the Head of Department on the recommendation of D.R.C. (Departmental Research Committee).
- 2. A candidate selecting dissertation must submit his/her dissertation not less than one week before the beginning of the IVth Semester Examination.
- 3. The candidate has to face the Viva-Voce conducted by DRC.

Activities:

- Scoring of the data: scoring the responses based on scoring key previously prepared and as per the objectives of the study.
- Tabulate the scored data: Preparation of suitable tables in MS excel, to enter the data as per the objectives of the study, submission of a report of the tabulated data to the supervisor.
- Analysis of the tabulated Data: Applying the suitable statistical analysis to the tabulated data. Graphical representation of the data, calculation of descriptive measures, Inferential analysis of the data based on objectives of the study. Identifying the major findings and discussion of the findings and a report of the same to be submitted to the supervisor.
- Reporting of the Research Study:

Chapterization: Preparation of chapter headings and sub headings

Writing of chapters:

Chapter One: Introduction

Chapter Two: Review of Related Literature

Chapter Three: Methodology

Chapter Four: Analysis and Interpretation of the Data

Chapter Five: Summary and Conclusion.

Preparation of Bibliography using APA Style

Preparation of Appendices

Submission of the Final Dissertation.

Semester IV Theory Course

MDH552: SPORTS BIOMECHANICS AND KINESIOLOGY

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should understand

- The meaning and scope of Kinesiology and Biomechanics in Physical Education and sports
- The location of muscles and the involvement of muscles in movement
- Principles of physics as applied to sports skills
- Application of laws of biomechanics in various skills and athletic events.
- The methods of analyzing skills and detecting faults during the performance of these skills.
- Usage of various techniques and tools to analyse skills.
- The method of improvising skills thereby increasing efficiency of skill performance

Unit I - Introduction to Biomechanics and meaning of terms

- Meaning and scope of Biomechanics, Meaning of terms- Kinetics and Kinematics, Speed, Velocity, Acceleration, Momentum, Force, Mass, parallelogram of forces, Gravity, work, energy
- Meaning and scope of Kinesiology, Planes and Axis, Fundamental movements at joints Cervical (neck), shoulder, elbow, Wrist, vertebral (trunk), Hip, Knee and ankle. Neural basis of movement motor units, proprioception.

Unit II – Skeletal System and Muscular system

- Skeletal system, types of joints, Joint stability, Range of motion; Muscular system
 - shapes of muscles, factors affecting force of muscle contraction, Role of muscles
 - Agonists or prime movers, antagonists, Synergists or neutralizers, fixators or stabilizers.
- Different muscles of the body Their locations, attachments and actions.

Muscles of the upper body: LatissimusDorsi, Rotator cuff (Inraspinatus, Supraspinatus, Subscapularis, Teres minor), Pectoralis major and minor, Rhomboid major and minor, Teres major, Trapezius, Triceps Brachii, Biceps Brachii, Brachialis, Deltoids, Scalene, Sternocleidomastoid, Rectus Abdominus

Muscles of the lower body: muscles of the neck, shoulders, upper back, lower back, abdomen, lower abdomen, Gluteus group (Gluteus major, medius and minor), quadriceps group (Rectus Femoris, VastusLateralis, VastusMedialis, Vastusintermedius), hamstring group (Biceps femoris, Semi tendinosus, Semi membranosus), tibialis anterior, Gastrocnemius and soleus, Sartorius, Tensor Fascia Lata - their locations and actions.

Unit III – Motion and Force

- Motion, types of motion, Newton's laws related to linear and angular motion, Projectile motion – Trajectory, Factors affecting horizontal range; Velocity, acceleration, momentum as applied to linear and angular motion.
- Force, types of force, Friction, Centripetal and centrifugal force.
- Air and water resistance their applications in sports
- Gravity, center of gravity, Kinetic and Potential energy.

Unit IV – Levers, Stability and Analysis of skills

- Levers Types and classes of levers, Stability factors affecting stability
- Kinesiological and Biomechanical analysis qualitative and quantitative analysis, tools of analysis. Analysis of track and field events (sprint, long jump, high jump, shot put, discus throw), selected skills in games (shooting in basketball, push, scoop and hit in hockey, kick, heading and stopping in football, service and spiking in volleyball, bowling and batting in cricket, Kabaddi, khokho, tennis service and drive)

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Semester IV Theory Course

MDS553: VALUE AND ENVIRONMENTAL EDUCATION

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should be able to

- Promote a new understanding and framework to help students achieve positive and purposeful lives for themselves and their communities through engaging with values to guide and inform their behaviour.
- This approach offers a new way of thinking about education and how children and young people can be supported to develop to become successful and happy members of society.
- Environmental education is concerned with those aspects of human behaviour which are more directly related to man's interaction with bio-physical environment and his ability to understand this interaction.
- To help the social groups and individuals to acquire knowledge of pollution and environmental degradation.
- To help social groups and individuals to acquire a set of values for environmental protection.

UNIT I – Introduction to Value Education

- Values: Meaning, Definition, Concepts of Values.
- Value Education: Need, Importance and Objectives.
- Moral Values: Need and Theories of Values.
- Value Systems: Meaning and Definition, Personal and Communal Values, Consistency, Internally consistent, internally inconsistent, Judging Value System, Commitment, Commitment to values.

Unit- II – Environmental Education

- Definition, Scope, Need and Importance of environmental studies., Concept of environmental education.
- Historical background of environmental education, Celebration of various days in relation with environment, Plastic recycling & prohibition of plastic bag / cover, Role of school in environmental conservation and sustainable development, Pollution free eco-system.

Unit - III Rural Sanitation and Urban Health

- Rural Health Problems, Causes of Rural Health Problems, Points to be kept in Mind for improvement of Rural Sanitation, Urban Health Problems, Process of Urban Health, Services of Urban Area, Suggested Education Activity, Services on Urban Slum Area, Sanitation at Fairs & Festivals, Mass Education.
- Sanitation in sports arenas, sports facilities, sanitation problems and requirements in educational institutions.

Unit - IV Natural Resources and related environmental issues:

- Water resources, food resources and Land resources,
- Definition, effects and control measures of: Air Pollution, Water Pollution, Soil Pollution, Noise Pollution, Thermal Pollution Management of environment and Govt. policies, Role of pollution control board.

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Semester IV Theory Course

MDS554: SPORTS SOCIOLOGY

Number of credits: 3 Number of hours: 3 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should be able to

- Understand the meaning of sports sociology and sports culture
- Understand the social values of sports
- Understand the cultural and political implications of sports
- Get acquainted with different sports institutions
- Understand the religious implications on sports
- Understand and appreciate the status of women in sports and their participation]
- Get knowledge about sports in societies of various other countries

UNIT I -Meaning of Sports Sociology and Sports Culture

- Definition and meaning of Sports Sociology, Sports a social phenomenon, sports sociology as a separate discipline. Nature need and scope of sports, and sports sociology. Sports and socialization of the individual.
- Culture, Sports Culture, basic concepts of culture, elements of culture, functions of culture, relationship of sports with other elements of culture.
- Social planning and physical culture work, free time and culture, physical culture as a requirement of social development.
- Development of socialistic production and physical culture.

UNIT II Values, Social Institutions and Commercial Sports

- Physical activity and the social attitude of infants, children and adolescents.
- Sports as a reflection and transmitter of values.
- Cross culture differences, ethnic, political and democratic issues related to sports.
- Social institutions Economic, political, religious. Sports as a social institution. Relationship of sports with other social institutions.
- Emergence and growth of commercial sports- Effects of commercialization of sports, status and income of athlete in commercial sports.

UNIT III Sports and Society

- Sports and social solidarity political consequences of international sports events.
- Reasons for combining sports and religion. Similarities and differences between sport and religion.
- Stratification sports and social stratification, mobility and opportunities,
- Sports participation and general careers and successes.
- Athletic retirement and social mobility.

UNIT IV Sports Women, Audience, Competition and Sports in Different Periods

- Women in sports The sports women in our society, participation and patterns among women. Gender in equation issues and future of women sports.
- Place of games and sports in different periods Ancient, middle and modern. Place of games and sports in socialistic countries – Russia, China, Czechoslovakia, Poland and Hungary.
- Consequences of competitions Sports competition as preparation for life.
- Sociometric evaluation process.
- The audience Sports and aggression, collective violence in sports.

References:

Ball and Ley. Sports and Social Order. Addison Wesley Pub. Co.

Cratty, B.J. <u>Social Dimensions of Physical Activity</u>. Englewood Cliffs, NJ:Prentice Hall Inc., 1967.

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Semester IV Theory Course

MDS555 INFORMATION & COMMUNICATION TECHNOLOGY (ICT) IN PHYSICAL EDUCATION

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should be able to

- State the meaning of information technology and communication technology.
- Concept, Elements, Process & Types of Communication.
- Concept & Importance of ICT.
- Fundamentals of Computers.
- MS Office Applications
- ICT in Teaching Learning Process Project Based Learning.
- Justify the need & Significance of ICT in Education.
- Explain the historical perspective of Educational Technology.
- State the emerging trends in Educational Technology.
- E-Learning & Web Based Learning.

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Unit I - Communication & Classroom Interaction

- Concept, Elements, Process & Types of Communication, Communication Barriers & Facilitators of communication, Communicative skills of English - Listening, Speaking, Reading & Writing
- Concept & Importance of ICT Need of ICT in Education, Scope of ICT: Teaching Learning Process, Publication Evaluation, Research and Administration, Challenges in Integrating ICT in Physical Education

Unit II – Fundamentals of Computers

- Characteristics, Types & Applications of Computers Hardware of Computer: Input, Output & Storage Devices Software of Computer: Concept & Types, Computer Memory: Concept & Types
- Viruses & its Management, Concept, Types & Functions of Computer Networks
 Internet and its Applications, Web Browsers & Search Engines Legal & Ethical Issues

Unit III – MS Office Applications

- MS Word: Main Features & its Uses in Physical Education
- MS Excel: Main Features & its Applications in Physical Education
- MS Access: Creating a Database, Creating a Table, Queries, Forms & Reports on Tables and its Uses in Physical Education
- MS Power Point: Preparation of Slides with Multimedia Effects
- MS Publisher: Newsletter & Brochure, Tools of ICT, their uses, advantages and disadvantages, applications
- Virtual learning environment,

Unit IV – ICT Integration in Teaching Learning Process

- Approaches to Integrating ICT in Teaching Learning Process Project Based Learning (PBL), Co-Operative Learning, Collaborative Learning, ICT and Constructivism: A Pedagogical Dimension
- E-Learning & Web Based Learning E-Learning, Web Based Learning, Visual Classroom
- Sof twares used across various teaching learning situations: Class room Teaching, technical teaching in areas such as biomechanics, physiology, psychology; Coaching, Commercial sports, Organisation, Officiating.

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Semester IV Practical Course

MDH556: TRACK AND FIELD IV: COMBINED EVENTS, CROSS COUNTRY, RACE WALKING, TRACK AND FIELD MARKING AND OFFICIATING

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should be able to

- Perform combined events and different finishing techniques.
- Perform cross country race, race walking technique.
- Understand the methods of track and field marking and officiating.
- Combined Events Decathlon and Heptathlon
- Cross Country
- Race Walking
- Track and Field marking and Officiating

SPECIALISATION RECORD

UNIT 1: History and development of Combined Events, Race walking and Cross Country

- Origin of the event
- Growth and development of the event

UNIT 2: Skills and Techniques

- Skills and techniques of Race walking
- Strategies in Decathlon, Heptathlon and Cross Country

UNIT 3: Fitness training

- Energy system involved in the race walking and cross country
- Training to develop the fitness parameters involved in the events
- Training plan of six weeks for race walking, combined events and cross country

UNIT 4: Rules and Regulations

- Officials required for combined events, cross country and race walking
- Rules pertaining combined events, cross country and race walking

UNIT 5: Layout and construction and maintenance of track and field arena

UNIT 6: Organization, Administration and managerial set up for conducting an athletic Meet

UNIT 7: Biomechanical principles

Race walking

UNIT 8: Injuries and Nutrition

- Event related injuries, prevention, treatment and rehabilitation.
- Nutrition specific to the events

^{*}The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded in consultation with the guide.

MDS557 LABORATORY PRACTICAL – COMPUTER APPLICATIONS

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

- Students will attain a level of basic computer awareness--how computers work, how
 computers are controlled, the impact of computers in education and physical
 education.
- Students will be introduced to different types of computer equipment, such as disc drives, printers, laserdiscs, modems, speech synthesis & video digitization.
- Students will receive hands-on experience with a number of general applications-word processing, spreadsheets.
- Students will receive hands-on experience with a number of physical education applications-- physical fitness assessment, diet analysis, game statistics, game simulation, computer assisted learning, scheduling, reaction time tests and motion analysis.
- Students will gain an awareness of the information storage and retrieval capabilities of the computer.
- Students will be introduced to techniques of instructional design in physical education using computers, laserdiscs and multimedia. Also, they will be introduced to the development and evaluation of computer software.

I – Microsoft Word

• Using the various options in Microsoft word to create folders, files, saving and their applications in administration of sports events and coaching.

II - Microsoft Excel

• Using Microsoft excel to prepare spreadsheets, insert graphs, analyse data and to prepare schedules etc.

III – Microsoft Powerpoint

• Prepare presentations

IV - Creating and using email

V – Using search engines

Semester IV Practical Course

MDS558: LABORATORY PRACTICAL – SPORTS BIOMECHANICS AND KINESIOLOGY

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

At the end of the course the student should be able to

- Identify the various planes and axis
- Perform various fundamental movements and the planes and axes in which they act.
- Palpate the various muscles of the body.
- Prescribe exercises for the development of specific muscles.
- Utilize the goniomoter to measure the joint angles
- Analyze the various skills and athletic events on the basis of kinesiological and biomechanical principles
- Use the camera and video to capture the still and live images to analyze the skills.

Kinesiology

- 1. Basic Anatomical Position
- 2. Planes and Axes
- 3. Fundamental movements at various joints Neck, Shoulder, Elbow, Wrist, Trunk, Hip, Knee and Ankle.
- 4. Identification and palpation of muscles Biceps Brachii, Triceps Brachii, Deltoids, Pectoralis Major, Rectus Abdominus, Latissimus Dorsi, Trapezius, Teres Major, Rotator cuff muscles, Ilio Psoas muscle, Gluteus group, Quadriceps group, Hamstring group, Soleus, Gastrocnemius.
- 5. Joint movement analysis
- 6. Muscular analysis of movement

Biomechanics

- 1. Center of Gravity
- 2. Goniometer testing flexibility and ROM.
- 2. Analysis of Standing, Sitting, walking, running.
- 3. Analysis of skills of various games.
- 4. Analysis of Long Jump, High Jump, Sprinting, Race walking, Shot Put, Discus Throw etc.
- 5. Video analysis of various skills as mentioned above.

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

Semester IV Practical Course

MDS 559: SPECIALISATION – HANDBALL / TENNIS / BASKETBALL (ANY ONE)

Number of credits: 4 Number of hours: 4 Marks: Internal - 30 External - 70

Objectives:

- Develop skills and fitness specific to a particular sport.
- Appreciate and be able to execute strategic play.
- Participate at a level appropriate to one's developmental stage.
- Share in the planning and administration of sport experience.
- Provide reasonable leadership.
- Work effectively within a group toward common goals
- Appreciate the rituals and conventions that give particular sports their unique meanings.
- Develop the capacity to make reasoned decisions about sport issues.
- Develop and apply knowledge about umpiring, refereeing, and training.
- Basic skills
- Advanced skills
- Teaching progression of different skills
- Drills for each of the skills
- Biomechanical analysis of the skills
- Specific fitness drills

SPECIALISATION RECORD

UNIT 1: History and development of the Game/Sport

- Origin of the Game
- Growth and development of the Game in India.
- Tournaments and awards

UNIT 2: Skills and Techniques

- Fundamental Skills
- Advanced skills
- Training drills

UNIT 3: Strategies and Tactics

- Training for tactics
- Training plan for a period of six weeks and twelve weeks at different levels (High school, college and university)

UNIT 4: Officiating

- Rules and Regulations
- System of officiating

UNIT 5: Layout and construction and maintenance of playfield/courts

UNIT 6: Organization, Administration and managerial set up for conducting Tournament / competition

UNIT 7: Biomechanics and Energy systems

- Biomechanical principles of the game/sport
- Energy systems involved in the games and fitness programme specific to the game

UNIT 8: Injuries and Nutrition

- Game/Sport related injuries Prevention, treatment and rehabilitation.
- Nutrition related to the game Off season, and pre, during and post competition

^{*}The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded in consultation with the guide.