

NAGALAND UNIVERSITY

(A Central University Established by an Act of Parliament No. 35/1989)

BACHELOR OF PHYSICAL EDUCATION & SPORTS (BPES) HONORS

SYLLABUS



UGC- NEP 2020 REGULATIONS

**SCHEME OF EXAMINATION AND SYLLABUS FOR THE
BACHELOR OF PHYSICAL EDUCATION & SPORTS (B.P.E.S.) HONORS**

(UG - CCFUP –Based on UGC- NEP-2020 Effective from Academic Year 2025)

(FOUR YEARS - EIGHT SEMESTERS - NEP)

2025 ONWARDS

UGC- NEP 2020 Regulations (2025 onwards)
Bachelor of Physical Education & Sports (B.P.E.S.) HONORS
(EIGHT SEMESTERS - NEP)

Preamble:

Physical Education is one of the most effective forms of education, delivered through physical exercises, recreational activities, and sports. It is an essential component of the overall education system, yielding outcomes through participation. These outcomes are both immediate and long-lasting, carrying significant value throughout life for people of all ages.

The curriculum framework for the 4-year B.P.E.S. (Bachelor of Physical Education and Sports) Honors undergraduate programme is designed to offer a comprehensive structure within the field of Physical Education. It aligns with the National Education Policy (NEP) 2020 and aims to meet the evolving needs of students. The framework supports the standardization and uniformity of Physical Education degrees nationwide, enabling regular programme evaluation within a consistent structure of graduate attributes, qualification descriptors, programme learning outcomes, and course-level learning objectives. While promoting uniformity in the curriculum, teaching methods, and assessment practices, it also encourages flexibility and innovation in programme design and delivery.

Aims of the Bachelor's degree programme in Physical Education

Physical education is concerned both with the physical outcome from the participation in physical activities and also the development of knowledge and attitude conducive to lifelong learning and participation in motor activities. The overall aims of bachelor's degree programme in Physical Education are:

- The acquisition and refinement of motor skills.
- To impart scientific knowledge of body response to various types of exercise.
- Promote fitness for optimal health and wellbeing through physical education and sports.
- Inculcate positive attitude towards physical activity and sports.
- Attain knowledge of the rules, regulation and their interpretation for “officiating” in sports and games.

- Inculcate the ability to organize sports and games in a professional manner.
- Enhance knowledge on scientific principles from allied subjects in Physical Education & Sports.
- Understand the concepts and role of different methods of sports training.
- Develop desirable health habits and social integration of sportspersons.

Eligibility

- Candidate must have passed the Higher Secondary Examination (+2) or any other examination recognized as equivalent.
- The reservation in seats for SC/ST/OBC/PWD/EWS and other categories shall be as per the rules of the Central Government/State Government, whichever is applicable.
- The candidate also shall be physically and medically fit to undergo vigorous physical activity apart from the minimum eligibility criteria.
- Applicant must have experience / represented the District/School in any game/Sports.

Other requirements

- Candidate seeking admission to BPES Honors must qualify the Physical Fitness Test.
- Be free from Physical Deformities.
- Should be Medically Fit to undergo the course.
- Achievement in Sports to be considered.

Eight Semester Ordinance

- Degree Title: BPES (Honors)
- Name of the Faculty: Faculty of Physical Education and Sports
- Duration: The BPES (Honors) programme shall be of duration of 4 (four) academic years, that is, 8 (eight) semesters.
- As per NEP-2020 the certificate/ diploma/ degree title is as follows:

1 Year (Two Semesters)	Certificate in Physical Education & Sports (CPES)
2 Years (Four Semesters)	Diploma in Physical Education (DPES)
3 Years (Six Semesters)	Bachelor's Degree in Physical Education (BPES)
4 Years (Eight Semesters)	Bachelor's Degree with Honors in Physical Education (BPES Honors)

Admission Procedure:

Admission shall be made on merit, on the basis of marks obtained in the entrance examination (Physical Fitness test, interview and percentage in qualifying examination) or any other selection process as per the policy of the State Government/ Affiliating University.

Duration of the Course

The course shall be of Four-year duration spread over eight semesters. The total working days for a semester shall not be less than 90 working days. The curriculum and syllabi for course shall be as prescribed from time to time. The Maximum duration to complete the course shall be 7 years.

Scheme of selection:

The selection of candidates for the B.P.E.S degree course is based on the following,

Appendix - I

Sl. No.	Details	Marks
1.	Physical Fitness Test (100 mts Run, Shot put, Broad Jump & 12/8 minutes (Run/Walk Test)	40 Marks
2.	Games Proficiency Test	25 Marks
3.	Sports Achievement	25 Marks
4.	Qualifying Exam Mark	10 Marks
Total		100 Marks

Attendance and Condonation

Students must have 75% of attendance in each course (Theory and Practical separately) for appearing in the examination.

Students who have 74% to 65% of attendance shall apply for condonation in the prescribed form along with the Medical Certificate or proof of participation in intercollege /inter university/National/International competitions or proof of participation in NCC/NSS programme. Students who have below 65% of attendance are not eligible to appear for the examination.

Breakup of Credits and Courses

The Undergraduate BPE programme offered by Colleges shall confirm to the Structure specified by the UGC Framework, 2023.

The student of 1-year certificate programme is mandated to complete a minimum of 40 credits,

The student of 2- year diploma programme shall complete 80 credits,

The student of 3-year degree programme is mandated to complete a minimum of 120 credits and the student of 4 - year Honors degree programme shall complete 160 credits

NEP Framework has specified the number of credits that a Bachelor student has to earn every year. **Table - I** specify the number of credits and number of courses that a student is expected to complete in 1st to 4th year duration respectively.

Sl. No	Courses	1 st Year Certificate	2 nd Year Diploma	3 rd Year Degree	4 th Year Honours
1.	Major Disciplinary Courses	8cr	30cr	60cr	80cr
2.	Minor Discipline Courses	8cr	16cr	24cr	32cr
3.	Multi- Disciplinary Courses	6cr	9cr	9cr	9cr
4.	Ability Enhancement Courses	6cr	8cr	8cr	8cr
5.	Skill Enhancement Course	6cr	9cr	9cr	9cr
6.	Common Value added courses	8cr	8cr	8cr	8cr
7.	Community Service	-	-	2cr	2cr
8.	Research Dissertation Project	-	-	-	12cr
		42cr	80cr	120cr	160cr

1. Major Disciplinary Courses: (MJD)

Major disciplinary courses are subject specific compulsory subjects that a student has to complete to obtain the UG/UG (Hons) Degree in the given discipline. Major disciplinary courses shall constitute 50% of the total credits.

MJD-1: History and Foundation of Physical Education

MJD-2: Exercise Physiology

MJD-3 Kinesiology & Sports Biomechanics

MJD-4 Methods of Physical Education

MJD-5 Sports Training

MJD-6 Test & Measurement in Physical Education

MJD-7 Athletics (Track & Field Events) & Indigenous Activity (Pyramid, Bharathiam, Hoops) Theory

MJD-8 Sports Psychology

MJD-9 Talent Identification in Sports

MJD-10 Sports Injuries and Rehabilitation

MJD-11 Sports Nutrition

MJD-12 Adapted Physical Education

MJD-13 Sports Engineering

MJD-14 Sports Journalism

MJD-15 Sports Medicine

MJD-16 Sports Entrepreneurship

MJD-17 Sports Technology

MJD-18 Research Methodology in Physical Education

MJD 19: Application of Statistics in Physical Education

MJD 20: Sports Sociology*

(*optional for 8th semester)

2. Minor Disciplinary Course: (MID)

Minor disciplinary courses refer to those subjects which are allied to the major discipline. These allied courses provide better understanding of the subjects.

MID-1 Major Games – 1 (Basketball, Badminton, Kabaddi & Kho-kho) Practical

MID-2 Major Games – II (Judo, Hockey, Table Tennis & Volleyball)

Practical

MID-3 Major Games - III (Cricket, Football, Handball & Tennis) Practical

MID-4 Athletics (Marking of Track & Field Events) Practical

MID-5 Major Games- IV (Gymnastics, Archery & Taekwondo) Practical

MID-6 Indigenous Activities (Lezium, Kene (Naga Wrestling) & Weight

Lifting) Practical MID-7 Recreation & Camping

3. Multi-Disciplinary courses:

All undergraduate students are mandated to pursue 9 credits worth of courses in such Multi-disciplinary subjects/Courses other than has Major/Minor discipline. The students shall choose any 3 multiple disciplinary courses of the following:

MDC-1 Basic and Systemic Anatomy & Physiology

MDC-2 Computer Applications in Physical Education

MDC-3 Sports Management

4. Ability Enhancement courses:

All undergraduate students are mandated to complete Credits worth of Courses which are expected to focus on communication skills, Linguistic skills, critical reading enhance academic writing skills for articulation and presentation of their thoughts clearly and coherently. These courses include.

AEC-1 English-1

AEC-2 MIL-1 (Alt. English /Hindi/ Naga Languages)

AEC-3 English-2

AEC-4 MIL-2 (Alt. English /Hindi/ Naga Languages)

5. Skill Enhancement Course/ Practical Courses:

These courses are focused at imparting practical skills, hands- on Training, soft skills, etc. to enhance the employability of students

SEC- PC-1 Indigenous Activities - I (Calisthenics, Minor Games, Drills & Marching)

SEC- PC-2 Indigenous Activities- II (Dand & Baitek, Light Apparatus & Yoga)

SEC- PC-3 Indigenous Activity - III (Lezume, General Fitness & Aerobic Dance)

6. Value Added common course:

Under NEP, the UGC has proposed for 6 to 8 credits of common course which are likely to add value to overall knowledge base of students. These courses include the following:

VAC-1 Understanding India

VAC-2 Environmental Studies

VAC-3 Digital Technologies

VAC-4 Health, Wellness & Yoga Education

7. Community Service:

As per the UGC guidelines all UG students should be exposed to 4 to 6-week Summer Internship in industrial organization/Training Labs/Research Institutions/Educational Institutions etc. Such Summer Internship is proposed to be conducted in between 4th Semester and 5th semester. A review report and award of grade based on practical skills learned by students during the 5th Semester will be given.

8. Research Project (12 Credits)**Evaluation****Theory Exams Total Marks: 100**

All Credit courses are evaluated for 100 marks. Internal Assessment component is for 40 marks and the End Semester University exam is for 60 marks for all papers.

Break up of Internal Assessment summer marks:

Total Internal Assessment mark for a theory subject is 40 marks. The breakup is:

i)	Mid Semester Exam (one) -	35 Marks
ii)	Percentage of Attendance -	5 Marks
Total -		40 Marks

Practical/Research Projects Exams Total Marks: 100

All Practical/Research Projects are evaluated for 100 marks. Internal Assessment component is for 40 marks and the End Semester University exam is for 60 marks.

Break up of Internal Assessment marks for Practicals /Project work/ Internships subjects:

Faculty member in-charge of practical shall evaluate the practical subjects for 40 marks. The break up is as follows:

i) Skill Demonstration/Knowledge/ Discipline	10
ii) Practical Record/Internship Report	25
iii) Percentage of Attendance	05
Total	40

The End Semester University exam is for 60 marks (EXTERNAL).

Marks for Attendance for both theory & practical is as follows:

Below 75%	0
75% - 80%	1
80% - 85%	2
85% - 90%	3
90% - 95%	4
95% - 100%	5

Internal Test Scheme:

Principal of the College schedules the Mid-Semester Exam for all courses during 8/9th week of start of classes. All faculty members are expected to conduct this Mid-Semester exam for 1.30 hr duration and evaluate, upload the marks to Controller of Examinations of University. Colleges are also requested to preserve the answer books of Mid-Semester exams until declaration of results by the University.

End-Semester University Exam:

Controller of Examinations (COE) of Nagaland University schedules the End-Semester exams for all theory and practical subjects based on University calendar.

(As per NEP Regulations, the passing minimum is 50% marks (IA + End semester put together

NAGALAND UNIVERSITY**Annexture-I****COURSE STRUCTURE AND SCHEME OF EXAMINATIONS FOR B.P.E.S.**

Se me ste r	Levels of Teachin g	Major Disciplin a ry Courses	Minor Disciplin ary Courses	Multi- Disciplin ary Courses	Ability Enhanceme ntcourses	Skill Enhance ment/Practi cal Courses	Value added /Common Course	Total Credits
I	100 Level	MJD-1 (4credit)	MID-1 (4credit)	MDC-1 Natural Sciences (3 credit)	AEC-1 English-1 (3 credit)	PC-1 Practical- 1 (3 credit)	VAC-1 EVS (2cr) & VAC-2 Understanding India (2cr) (4 credit)	21 credit
II	100 Level	MJD-2 (4 credit)	MID-2 (4 credit)	MDC-2 Social Sciences (3 credit)	AEC-2 MIL- 1(Alternative English/ Naga languages/ Hindi/ (3 credit)	PC-2 Practical-2 (3 Credit)	VAC-3 Health & Yoga (2cr) &VAC-4 Digital Technologies (2cr) (4 credit)	21 credit

Exit option with Certificate in Physical Education (CPES)

Se me ste r	Levels of Teachin g	Major Disciplin a ry Courses	Minor Disciplin ary Courses	Multi- Disciplin ary Courses	Ability Enhancement courses	Skill Enhance ment/Practi cal Courses	Value added /Common Course	Total Credits
III	200 Level	MJD-3 (8credit)	MID-3 (4credit)	MLDC-3 Natural Sciences (3 credit)	AEC-3 English-II (3 credit)	PC-3 Practical-3 (3 credit)	-	21 credit
IV	200 Level	MJD-4 (8 credit)	MID-4 (4 credit)	-	AEC-4 MIL- II (Alternative English/ Naga languages/ Hindi/ (3 credit)	PC-4 Practical-4 (3 Credit)	Community Service For 4-6 week (2 credit)	21 credit

Exit option with Certificate in Physical Education (DPES)

Se me ste r	Levels of Teachi ng	Major Disciplin aryCourses	Minor Disciplin ary Courses	Multi- Disciplin ary Courses	Ability Enhanceme ntcourses	Skill Enhancem ent/Practi cal Courses	Value added /Common Course	Total Credits
V	300 Level	MJD- 7 MJD- 8 (8credit)	MID-5 (4credit)	-	-	PC-5 Practical-5 (4 credit)	Internship in Educational Institution For 4-6 week (4 credit)	20 credit
VI	300 Level	MJD-9 MJD-10 MJD-11 (12 credit)	MID-6 (4 credit)	-	-	PC-6 Practical-6 (4 Credit)	-	20 credit

Exit option with Certificate in Physical Education (BPES)

Se me ste r	Levels of Teachi ng	Major Disciplinary Courses	Minor Disciplin ary Courses	Multi- Disciplin ary Courses	Ability Enhanceme ntcourses	Skill Enhancem ent/Practi cal Courses	Value added /Common Course	Total Credits
VII	400 Level	MJD- 12 MJD- 13 MJD- 14 (12 credit)	MID-7 (4credit)	-	-	PC-7 Practical-5 (4 credit)	-	20 credit
VII I	400 Level	MJD-15 MJD-16 (12 credit)	Research Project (12 Credit) Research + Viva					20 credit

(OR) Optional for 8th Semester

VII I	400 Level	MJD-15 MJD-16 MJD-17* MJD-18* (18 credit)	-	-	-	PC-7 Practical- 8 (4 credit)	-	20 credit
----------	--------------	---	---	---	---	---------------------------------------	---	--------------

Bachelor's Degree with Honors in Physical Education (BPES HONORS)

SEMESTER I

Code No	Nature of Course	Title of the Course	Credits	Hours of Teaching
MJD 1	Major Disciplinary courses (compulsory)	MJD-1: History and Foundation of Physical Education	4	5
MID 1	Major Disciplinary courses	MID-1(A): Major Games – 1 (Basketball, Badminton, Kabaddi & Kho-kho) Practical	4	5
MDC 1	Multi-Disciplinary courses (compulsory)	MDC-1. Basic and Systemic Anatomy & Physiology	3	4
AEC I & II	Ability Enhancement courses I & II English or Indian Language	AEC-1 (A). English – I	3	4
SEC	Skill Enhancement Course	SEC-1(A): Indigenous Activities - I (Calisthenics, Minor Games, Drills & Marching)	3	4
VAC	NEP Value added common courses I & II (compulsory)	VAC-1. Environmental Studies	2	4
		VAC-2. Understanding India (Theory/Field based)	2	4
		Total Credits/ Total Hours of Work	21 Credit	30 Hours

SEMESTER –II

Code No	Nature of Course	Title of the Course	Credits	Hours of Teaching
MJD 2	Major Disciplinary courses (compulsory)	MJD-2: Exercise Physiology	4	5
MID 2	Major Disciplinary courses	MID-2(A): Major Games – II (Judo, Hockey, Table Tennis & Volleyball) Practical	4	5
MLD 2	Multi-Disciplinary courses (compulsory)	MDC-2.(Physical Sciences) Computer Applications in Physical Education	3	4
AEC III & IV	Ability Enhancement courses III& IV English or Indian Language	AEC-4 (A). MIL – 2	3	4
SEC	Skill Enhancement Course	SEC-2(A): Indigenous Activities- II (Dands & Baiteks, Light Apparatus & Yoga) Practical	3	4
VAC	NEP Value added common courses I & II (compulsory)	VAC-3. Health, Wellness & Yoga Education	2	4
		VAC-4. Digital Technology (Theory/Field based)	2	4
		Total Credits/ Total Hours of Work	21 Credit	30 Hours

SEMESTER III**SEMESTER III**

Code No	Nature of Course	Title of the Course	Credits	Hours of Teaching
MJD 3	Major Disciplinary courses (compulsory)	MJD 3: Kinesiology & Sports Biomechanics	4	5
MJD 4		MJD 4: Methods of Physical Education	4	5
MID 3	Major Disciplinary courses	MID-3(A): Major Games - III (Cricket, Football, Handball & Sepak Takraw)	4	5
MLD 3	Multi-Disciplinary courses (compulsory)	MLD-3.(Humanities & Social Sciences) Sports Management	3	4
AEC V & VI	Ability Enhancement courses V& VI English or Indian Language	AEC-5 (A). English- III	3	4
SEC	Skill Enhancement Course	SEC-3(A): Indigenous Activity (Lezume, General Fitness & Aerobic Dance)(Field Based)	3	4
Total Credits/ Total Hours of Work			21 Credit	27 Hours

SEMESTER -IV**SEMESTER IV**

Code No	Nature of Course	Title of the Course	Credits	Hours of Teaching
MJD 5	Major Disciplinary courses (compulsory)	MJD 5: Sports Training	4	5
MJD 6		MJD 6: Test & Measurement	4	5
MJD 7		MJD 7: Athletics (Track Events) & Indigenous Activity (Pyramid, Lagori, Hoops) Practical	4	5
MID 4	Minor Disciplinary courses	MD-4(A): Athletics (Marking of Track & Field Events) Theory	4	5
AEC VII & VIII	Ability Enhancement courses VII & III	AEC-8 (A). MIL -IV	3	4
Project	WP/Internship	Community Engagement	2	6
Total Credit/Total hours of work			21 Credit	30 Hours

SEMESTER –V

SEMESTER V				
Code No	Nature of Course	Title of the Course	Credits	Hours of Teaching
MJD 8	Major Disciplinary courses (compulsory)	MJD 8: Sports Psychology	4	5
MJD 9		MJD 9: Talent Identification in Sports	4	5
MJD 10		MJD 10: Sports Injuries and Rehabilitation	4	5
MID 5	Minor Disciplinary courses	MID-5(A): Major Games- IV Athletics (Field Events), Archery & Taekwondo	4	5
SKD	Skill Development Course	MJD 15 – Summer Internship	4	6
Total Credits/ Total Hours of Work			20 Credit	26 Hours

SEMESTER –VI

SEMESTER VI				
Code No	Nature of Course	Title of the Course	Credits	Hours of Teaching
MJD 11	Major Disciplinary courses (compulsory)	MJD 11: Sports Nutrition	4	5
MJD 12		MJD 12: Adapted Physical Education	4	5
MJD 13		MJD 13: Sports Engineering	4	5
MJD 14		MJD 14: Sports Journalism	4	5
MID 6	Minor Disciplinary courses	MID-6(A): Indigenous Activities (Lezium, Kene (Naga Wrestling) & Weight Lifting)	4	5
Total Credits/ Total Hours of Work			20 Credit	25 Hours

SEMESTER – VII

SEMESTER VII				
Code No	Nature of Course	Title of the Course	Credits	Hours of Teaching
MJD 15	Major Disciplinary courses (compulsory)	MJD 15: Research Methodology in Physical Education	4	5
MJD 16		MJD 16: Application of Statistics in Physical Education	4	5
MJD 17		MJD 17: Sports Technology	4	5
MID 7	Minor Disciplinary courses	MID-7(A): Recreation & Camping	4	5
MID 8		MID-8(A): Educational Tour	4	5
		Total Credits/ Total Hours of Work	20 Credit	25 Hours

SEMESTER - VIII

SEMESTER VIII				
Code No	Nature of Course	Title of the Course	Credits	Hours of Teaching
MJD 18	Major Disciplinary courses (compulsory)	MJD 18: Sports Medicine	4	5
MJD 19		MJD 19: Sports Entrepreneurship	4	5
MID	Research Project	Research Project	12	15
MJD 20	or Major Disciplinary Course 3	Or MJD 20: Sports Sociology (*optional for 8th semester)		
		Total Credits/ Total Hours of Work	20 Credit	25 Hours

**BACHELOR OF PHYSICAL EDUCATION AND SPORTS (B.P.E.S.). HONOURS IN
PHYSICAL EDUCATION AND SPORTS**

Semester-I

Paper-I

Course No.: MJD-1

Course Type: Major Disciplinary Course

Course Title: History and Foundation of Physical Education

Credit: 04

Max. Marks: 100

Sessional Marks: 40

End semester exam marks: 60

Learning outcomes:

1. The pass out would be able to compare the relationship between general education and physical education.
2. He would be able to identify and relate with the History of Physical Education.
3. He would be able to comprehend the relationship between Philosophy, Education and Physical Education.
4. He would be able to identify the works of Philosophers of Education and Physical Education.
5. He would know recent developments and academic foundation of Physical Education.

Unit-I

Introduction to Physical Education

Meaning, Definition and Scope of Physical Education – Aims and Objective of Physical Education - Importance of Physical Education in present era. - Misconceptions about Physical Education.

Unit-II

Historical Development of Physical Education in India

Vedic Period (2500 BC – 600 BC), Early Hindu Period (600 BC – 320 AD) and Later Hindu Period (320 AD – 1000 AD), Medieval period - Post Mughal British Period (Before 1947) Y.M.C.A. and its contributions. - Physical Education in India (After 1947) - The early history and significant stages in the revival and development of the modern Olympic movement - Educational and cultural values of Olympic movement

Unit-III

Philosophical Foundation of Physical Education

Philosophical foundation: Idealism, Pragmatism, Naturalism, Realism. - Philosophy and Culture.- Fitness and wellness movement in the contemporary perspectives - Sports for all and its role in the maintenance and promotion of fitness.

Unit-IV

Foundation of Physical Education

Biological (Growth and development, Age and gender characteristics, Body Types) - Psychological (Attitude, interest, Cognition, emotions and sentiments, Practical suggestion from psychology) - Sociological (Society and culture, Social acceptance and recognition, Leadership in physical education)

References:

1. Bucher, C. A. (n.d.) - Foundation of physical education. St. Louis: The C.V. Mosby Co.
2. Deshpande, S. H. (2014) - Physical Education in Ancient India. Amravati: Degree college of Physical education.
3. Dash, B.N. (2003.) –Principles of Education, Neelkamal publication, Hyderabad.
4. Kamlesh, M.L. (2002) –Sociological Foundation of Physical Education, Metropolitan Book co. Pvt. Ltd., Delhi.
5. Pandey, R.S.(1991) Philosophical & Sociological Foundation of Education, Vinod PustakMandir, Agra,.
6. Bhatia, K.K. &Narang, C.L. (1984.)– Philosophical & Sociological Bases of Education, Prakash Bros., Ludhiana.
7. Adams, William.C (1991.) – Foundation of Physical Education Exercises and Sports Sciences, Lea and Febigor, Philadelphia.
8. Dr. Kamlesh M.L. (2004) - Principles and History of Physical Education and Sports, Friends Publication (India) New Delhi.
9. Dr. B.C.Kapri, Fundamentals of Physical Education, Friends Publication, DariyaGanj, Delhi (India).

Paper-II**Course No.: MID-1****Course Type: Minor Disciplinary Course****Course Title: Major Games – I (Basketball, Badminton, Kabaddi & Kho- Kho) Practical****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

1. History and Development of the game at International and National level.
2. Dimensions and marking of playing area.
3. Basic requirements of the playing area.
4. Fundamental skills of the game.
5. Skill tests, scoring and arrangement of the skill tests.
6. National and international organizations / federations of the game.
7. Rules of the game with their interpretations.
8. Team selection and coaching in that game.
9. Officiating & Referee / Umpire /scorer /curatorship for self-employment.

Paper-III**Course No.: MDC-1****Course Type: Multi-Disciplinary Course****Course Title: Basic and Systemic Anatomy & Physiology****Credit: 03****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Outcomes:**

1. The student will be oriented with the basic structure and function of human body by identifying, comparing and relating different systems, organs and their functional and structural units.
2. He would be able to Relate and interpret the role of exercise on body systems and its relation to well-being, through literature reviews and physical conditioning exercises.
3. Adapt the art to apply the knowledge of anatomy and physiology in physical activity classes at school level.
4. Construct anatomy and physiology related pedagogical materials exploring their creative imaginations while working in group and using technology.

Unit-I

Introduction of Anatomy and Physiology in the field of Physical Education - Structural and functional demonstration of human cell - Skeletal System- classification and functions - Anatomical terms related to body movements - Structure and types of bones, joints in human body.

Unit-II

Structure and function of Muscle - Major classifications of Muscles - Types of muscular contractions (Isotonic, Isometric, Isokinetic) and their roles in physical activity - Concept of agonist and antagonist muscles and muscle imbalance.

Unit-III

Structural and functional introduction to circulatory system - Concept of stroke volume, cardiac output and cardiac index - Respiratory System (structural and organizational overview); Functional mechanism of respiration (External and Internal Respiration)

Unit-IV

Structural units and functional mechanism of digestive system and excretory system - Classification of Nervous System on the basis of its structure and functions.

Reference:

1. Appuseries (2012) How the Human Body Works - Kids Animation Learn Series. [Online] Available from: https://www.youtube.com/results?search_query=APPUSERIES+human+body+ [Accessed 20th July 2016].
2. Bannister, L. H. & et.al.(2000) Gray'sAnatomy.Churchill Living Stone.
3. Boone, T. (2014) Exercise physiology.Jones& Bartlett Learning.
4. Davidson, D.S. & Morgan, B. (2002) Human body revealed. Great Britian, Dorling Kindersley.
5. E Learning for kids- Founding Dreams (Date not Available) Science- Body Parts. [Online] Available from: <http://www.e-learningforkids.org/science/lesson/body-parts/>[Accessed 20th July 2016]
6. Foss, M. L., Keteyian, S. J. & Fox, E. L., (1998).Fox's physiological basis for exercise and sport. Boston, Mass, WCB/McGraw-Hill.
7. Get Body Smart (2016) An online examination of human anatomy and physiology- Animated Text Narrations and Quizzes to Explain the Structures and Functions of the Human Body Systems. [Online] Available from: <http://www.getbodysmart.com/> [Accessed 20th July 2016].
8. Jam Campus (2018) THE PARTS OF A CELL SONG. [online video] Available at: <https://www.youtube.com/watch?v=NkC9AiJf7gI> [Accessed 03 July 2018].

Paper-IV**Course No.: AEC-1****Course Type: Ability Enhancement courses****Course Title: English – I (As prescribed by the University)****Credit: 03****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Paper-V****Course No.: SEC-1****Course Type: Skill Enhancement Course (Practical)****Course Title: Indigenous Activities – I (Calisthenics, Minor Games, Drills & Marching)****Credit: 03****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Indigenous Activities**

1. Concept of Indigenous activities.
2. History of Indigenous activities.
3. Principles and Importance of indigenous activities.
4. Various types of activities with different equipment.

Paper-VI**Title: VAC-1: Environmental Studies (EVS)****(As prescribed by the University)****Credit: 02****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

Paper-VII**Title: VAC-2: Understanding India (Theory/Field based)****(As prescribed by the University)****Credit: 02****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

Semester-II**Paper-I****Course No.: MJD-2****Course Type: Major Disciplinary Course****Course Title: Exercise Physiology****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Outcomes:**

1. The student would be empowered with the applicable knowledge of physiology in physical activity and sports.
2. The learner would be able to incorporate this knowledge in the training and coaching programme for the betterment of his trainee's performance.

Unit-I**Functional Adaptations to Exercise**

Hormonal control during exercise - Exercise and neuromuscular system - Metabolic adaptations to exercise - Cardio-respiratory changes - Effects of exercise and training on health and fitness.

Unit-II**Energy Continuum and Recovery Process**

Metabolism and exercise - Recovery from exercise - Replenishment of energy stores during recovery process - Removal of excess lactic acid produced during exercise - Restoration of myoglobin oxygen stores

Unit-III**Exercise in hot and cold environment**

Body temperature regulations - Physiological responses to exercise in the heat - Acclimatization to exercise in heat - Physiological responses to exercise in cold - Health risks during exercise in the cold.

Unit-IV**Altitude and physiology**

Exercise performance at altitude - Physiological responses to acute altitude exposure - Chronic altitude exposure and acclimatization.

Aging process and Ergogenics

Age related changes and exercise - Ergogenic aids and physical activity

References:

1. W. Larry Kenney, Jack H. Wilmore, David L. Costill, 2012, Physiology of Sports and Exercises.
2. Robert A. Robergs, Scott O. Roberts, 2000, Fundamental Principles of Exercise Physiology for Fitness, Performance, and Health.
3. Larry G. Shaver, 1982, Essentials of Exercise Physiology.
4. Dr. Sandhya Tiwari, 2006, Exercise Physiology.
5. M. Dena Gardiner, 1985, The Principles of Exercise Therapy.
6. Edward L. Fox, Richard W. Bowers, Merle L. Foss, 1981, The Physiological Basis of
7. Physical Education and Athletics.
8. Michael S. Bahrke, Charles E. Yesalis, 2002, Performance – Enhancing Substances in Sport and Exercises.

Paper-II**Course No.: MID-2****Course Type: Minor Disciplinary Course****Course Title: Major Games – II (Judo, Hockey, Table Tennis & Volleyball) Practical****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

1. History and Development of the game at International and National level.
2. Dimensions and marking of playing area.
3. Basic requirements of the playing area.
4. Fundamental skills of the game.
5. Skill tests, scoring and arrangement of the skill tests.
6. National and international organizations / federations of the game.
7. Rules of the game with their interpretations.
8. Team selection and coaching in that game.
9. Officiating & Referee / Umpire /scorer /curatorship for self-employment.

Paper-III**Course No.: MLD-2****Course Type: Multi- Disciplinary Course****Course Title: Computer Applications in Physical Education****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Outcomes**

1. The student will be oriented with the basic knowledge of computer applications.
2. The student will be able to apply the knowledge in the framing of training programs.
3. The outcome of this course will help him in gathering, storage and processing of huge information in relation to inputs, outputs and feedback of sports training programs.

Unit-I**Introduction to Computer**

Information and communication technology (ICT) - Application of Computers in Physical Education - Components of computer, input and output device - Application software used in Physical Education and sports.

Unit-II**Word Processing**

Getting started with Microsoft Word - Creating, saving and opening a document - Formatting Editing features Drawing table - Page Setup, Paragraph Alignment, Spelling and Grammar Check, Printing Option, Inserting - Page Number, Graph and Footnote.

Unit-III**Spreadsheet Program**

Getting started with Microsoft Excel - Creating, saving and opening spreadsheet - Creating formulas - Format and editing features for charting data.

Unit-IV**Presentation Software**

Getting started with Microsoft Power Point - Creating, saving and opening a ppt. file - Format and editing features slide show, design, inserting slide number - Enhancing of Picture, Graph, Table - Finalizing of a presentations.

References:

1. Irtegov, D. (2004). Operating system fundamentals. Firewall Media.
2. Frye, C. & Lambert, J.(2015). Microsoft Office 2016 Step by Step, Microsoft Press.
3. Milke, M.(2007). Absolute beginner's guide to computer basics. Pearson Education Asia.
4. Sinha, P. K. & Sinha, P. (2004).Computer fundamentals. 4th edition, BPB Publication.

Paper-IV**Course No.: AEC- 2****Course Type: Ability Enhancement courses****Course Title: Alternative english/ AO/Tenyidie/ Hindi/****(As Prescribed by the University)****Credit: 03****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Paper-V****Course No.: SEC- 2****Course Type: Skill Enhancement Course (Practical)****Course Title: Indigenous Activities- II (Dands & Baiteks, Light Apparatus & Yoga)****Credit: 03****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Indigenous Activities**

5. Concept of Indigenous activities.
6. History of Indigenous activities.
7. Principles and Importance of indigenous activities.
8. Various types of activities with different equipment.

Paper-VI**Title: VAC- 3: Health, Wellness & Yoga Education (As Prescribed by the University)****Credit: 02****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Objectives:**

- Describing Health & Wellness programs and services offered, how to access them, and their value to their well-being.
- Learn that principles of nutrition are all important parts of overall wellness.
- To learn the basic concept of wellbeing.
- Demonstrate how to get healthy and stay healthy using multiple strategies.
- Identify healthy behaviours and practices that help to avoid and reduce health risks.
- Yoga education to practice mental hygiene.
- Yoga education to integrate moral values
- Yoga education to possess emotional stability.
- Learn the physical fitness management.

Unit-I**Health & Wellness**

Define and differentiate health and wellness - Components of health wellness and their relationship between physical activity - Local, demographic, societal issues and factors affecting health and wellness.

Diet and nutrition for health & wellness - Essential components of balanced diet for healthy living with specific reference to the role of carbohydrates, proteins, fats, vitamins & minerals - malnutrition, under nutrition and over nutrition.

Unit-II**Management of Health And Wellness**

Meaning & importance of various dimensions of wellness. Relationship of physical fitness in achieving wellness. Drugs, doping and wellness. Role of diet and exercise in health management.

Unit-III**Yoga Education**

Meaning and definition of yoga and its aims and objectives - Basic principles of yoga and its importance in our daily life - Yoga for mental attitude - Mind, body, breath and emotional level for higher plan of living.

Unit-IV

Yoga Practices

Types and limbs of yoga - Yoga postures – Asana - Breathing Practices – Pranayama -Relaxation- Meditation - Mudra.

Unit-V

Fitness Activities

Types of fitness activities - Outdoor activities – Basic movement patterns. Indoor activity – Aerobics/Dance Fitness, Resistance Training for fitness.

Reference:

1. Physical Activity and Health by Claude Bouchard, Steven N. Blair, William L. Haskell. 2. Mental Health Workbook by Emily Attached & Marzia Fernandez, 2021.
2. Mental Health Workbook for Women: Exercises to Transform Negative Thoughts and Improve WellBeing by Nashay Lorick, 2022
3. Lifestyle Diseases: Lifestyle Disease Management, by C. Nyambichu & Jeff Lumiri, 2018.
4. Physical Activity and Mental Health by Angela Clow & Sarah Edmunds, 2013.
5. The Fitness Mindset by Brian Keane
6. Health Promotion: Mobilizing Strengths to Enhance Health, Wellness, and Well-being [1 ed.] F.A. Davis Company.
7. Yoga RX: A Step-by-Step Program to Promote Health, Wellness, and Healing for Common Ailments, Broadway.
8. Advanced Hatha Yoga: Classic Methods of Physical Education and Concentration [1 ed.], Inner Traditions.
9. Yoga and Physical Education, National Council of Educational Research and Training (NCERT), India.
10. Wealth First: Winning at Weight Loss and Wellness.
11. Administration of Health and Physical Education Programme. Bucher, Charles A.
12. Treaties of Hygiene and Public Health, Ghosh, B.N.
13. Principles of Public Health Administration 2003, Hanlon, John J.
14. The School Health and Health Education, Turner, C.E.
15. Health Education (National Education Association of U.T.A.), Moss et. al.
16. The School Health Education (Harber and Brothers, New York), Nemir A.
17. Nutrition Encyclopedia, edited by Delores C.S. James, The Gale Group, Inc.
18. The Stone Age Health Programme: Diet and Exercise as Nature Intended. Angus and Robertson, Boyd-Eaton S. et al (1989)
19. Stress, How Your Diet can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acids, Thorons, Terras S. (1994).

Paper-VII

Title: VAC- 4: Digital Technologies (Theory/Field based)
Max. Marks: 100

Credit: 02 (As Prescribed by the University)

Sessional Marks: 40

End semester exam marks: 6

Unit 1: Introduction to Digital Technologies in Physical Education

- 1.1 The Evolution of Technology in Physical Education
- 1.2 Benefits of Digital Tools (Engagement, Data Tracking, Personalized Learning)
- 1.3 Ethical and Privacy Considerations
- 1.4 Current Trends: Wearables, Apps, and Gamification

Unit 2: Wearable Technology and Fitness Tracking

- 2.1 Types of Wearable Devices and Their Functions
- 2.2 Monitoring Heart Rate, Steps, and Physical Activity Levels
- 2.3 Using Data to Personalize Fitness Programs
- 2.4 Challenges: Accuracy, Accessibility, and Cost

Unit 3: Mobile Apps and Gamification in PE

- 3.1 Best Apps for PE (Sworkit, Coach's Eye, Strava)
- 3.2 Gamification Strategies (Badges, Leaderboards, Challenges)
- 3.3 Augmented Reality (AR) and Virtual Reality (VR) in PE
- 3.4 Creating Engaging Digital Workouts

Unit 4: Data Analytics and Performance Assessment

- 4.1 Introduction to Sports Analytics in PE
- 4.2 Video Analysis Tools (e.g., Dartfish, Hudl)
- 4.3 Using Dashboards for Student Progress Tracking
- 4.4 Integrating Technology into PE Curriculum Standards

REFERENCE:

- Armour, K., & Macdonald, D. (Eds.). (2012). *Research methods in physical education and youth sport*. Routledge.
- Lupton, D. (2016). *The quantified self: A sociology of self-tracking*. Polity Press.
- Millington, B. (2016). *Fitness gaming: Digital exercise and the gamification of physical activity*. Palgrave Macmillan.
- Pangrazi, R. P., & Beighle, A. (2019). *Dynamic physical education for elementary school children* (19th ed.). Human Kinetics.
- Silverman, S., & Mercier, K. (2015). *Teaching for physical literacy: A guide for K-12 teachers.* Human Kinetics.

Semester-III

Paper-I

Course No.: MJD-3

Course Type: Major Disciplinary Course

Course Title: Kinesiology & Sports Biomechanics

Credit: 04

Max. Marks: 100

Sessional Marks: 40

End semester exam marks: 60

Learning outcomes:

1. The student would be Oriented with the skeletal structure of human body by identifying the origin and insertion of various muscles.
2. Orient the students in basic structure and functions of primary joints of the body.
3. Relate and interpret the role of various mechanical principles in human movement

Unit-I

Introduction to Kinesiology and Sports Biomechanics

Importance of Kinesiology and Biomechanics in sports and physical activities - Origin and Insertion on bones and Action of major Muscles - Types of joints with their structure and functions.

Unit-II

Mechanical Concepts

Speed/ Velocity/ Acceleration

Velocity as a Vector Quantity - Determining the Direction of the Velocity Vector - Calculating Average Speed, Average Velocity and average Acceleration - Average Speed versus Instantaneous Speed.

Distance, Displacement (Calculating average distance and displacement)

Fundamental concepts of following terms - Fluid resistance – Buoyancy

Newton's Laws of Motion – and their application to sports activities.

Unit-III

Kinetic/Kinematics Concept for Analysis Human Motion

Fundamental concepts of following terms - Axes and Planes (Centre of Gravity, Equilibrium, Line of Gravity) - Basic Concept related to kinetics (Inertia, Mass, Force, Centre of Gravity, Pressure, Density, Torque & Impulse) - The Biomechanics of the Human Upper Extremity.- The Biomechanics of the Human Lower Extremity.

Unit-IV

Qualitative/ Quantitative Analysis

Angular Kinematics of Human Movement - Linear Kinetics of Human Movement

Reference Books:

1. Anthony J. Blazeovich (2017). Sports Biomechanics: The Basics: Optimising Human Performance: bloomsburry
2. By Peter M. (2013), Biomechanics of Sport and Exercise: Human Kinetics
3. Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: Poompugar Pathipagam.
4. BeotraAlka, (2000) Drug Education Handbook on Drug Abuse in Sports: SportsAuthority of India Delhi.
5. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
6. David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.
7. Fox, E.L., and Mathews, D.K. (1981).The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.
8. Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co.
9. Richard, W. Bowers.(1989). Sports Physiology. WMC: Brown Publishers.
10. Sandhya Tiwaji. (1999). Exercise Physiology.Sports Publishers.
11. Shaver, L. (1981).Essentials of Exercise Physiology. New Delhi: Subject Publications.
12. Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication.
13. William, D. McAradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance. Philadelphia: Lippincott Williams and Wilkins Company.
- 14.

Paper-II**Course No.: MJD- 4****Course Type: Major Disciplinary Course****Course Title: Methods of Physical Education****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Outcomes:**

1. The student will be oriented with the basic knowledge of methods of Physical Education.
2. The student will be able to apply the knowledge in the organising the tournaments.
3. The outcome of this course will help him in drawing of fixtures, preparation of lesson plans and teaching the indigenous activities.

Unit-I**Introduction**

Meaning of method - Factors influencing method - Presentation technique - Planning and presentation - Personal preparation - Technical preparation -common characteristics of good preparation - step in the way of presentation. Teaching aids - Class management-Principles to be adopted for good class management.

Unit-II**Preparation of Lesson Plan**

Lesson plan-Values of lesson plan-Types of lesson plan-General lesson plan- particular lesson plan-Variou methods of teaching physical activities.

Unit-III**Tournaments & Fixtures**

Intramural and Extramural competitions- Incentives and awards-methods of organizing and conducting tournaments and sports meet-Game tours.

Tournaments - Types of Tournament, Knock Out, League, Combination Tournaments, Methods of drawing Fixtures.

Unit-IV**Teaching Indigenous Activities**

Teaching activities of minor games - major games track and Field - Yogic Practice, Suryanamaskar – Calisthenics - Light apparatus - Rhythmic activities - Commands, Marching.

References:

1. Thirunarayanan C and S. Harihara Sharma, (1989) Methods in Physical Education, Karaikudi.
2. Kamelsh M.L. (1994) Scientific Art of Teaching Physical Education, New Delhi: Metropolitan Book Company.
3. Bucher, Charles and Krotee, Mar, L. (1993) Management of Physical Education and Sport, London: Mosby Company.
4. Kozman and Jackson, Methods in Physical Education, New York: W.B. Saunders Co.
5. Bacher and Barnhard, Methods and Materials for Secondary School Physical Education, New York: C.V. Mosby Co.

Paper-III**Course No.: MID-3****Course Type: Minor Disciplinary Course****Course Title: Major Games - III (Cricket, Football, Handball & Sepak Takraw)****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

1. History and Development of the game at International and National level.
2. Dimensions and marking of playing area.
3. Basic requirements of the playing area.
4. Fundamental skills of the game.
5. Skill tests, scoring and arrangement of the skill tests.
6. National and international organizations / federations of the game.
7. Rules of the game with their interpretations.
8. Team selection and coaching in that game.
9. Officiating & Referee / Umpire /scorer /curatorship for self-employment.

Paper-IV**Course No.: MID-3****Course Type: Multi-Disciplinary Course****Course Title: Sports Management****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Outcomes:**

1. The student would understand the importance of management of Physical Education.
2. He shall gain knowledge regarding management of Physical Education and Sports at different level.
3. He will be able to organize various Physical Education program.
4. He would know about various schemes and policies of State & Central Government.
5. He would know about planning of facility and financial management.

Unit-I**The Management Process:**

Definition, Principles, Nature and Concept of Sports Management - The purpose scope, limitations & Functions of Sports Management - Essential skills of Sports Management - Qualities and competencies required for the Sports Manager - Event Management in physical education and sports.

Unit-II**Leadership in Sports Management Process:**

Meaning and Definition of leadership - Leadership style and method - Elements of leadership - Forms of Leadership (Autocratic, Laissez-faire, Democratic & Benevolent Dictator) - Qualities of administrative leader - Preparation of administrative leader - Leadership and Organizational performance.

Unit-III**Planning and Management of sports at Institutional level:**

Sports Management in Schools, colleges and Universities - Factors affecting Sports planning in school or college sports programme – Need and Importance of Programme Development (Intramural & Extramural Tournaments) – Factors influencing Programme Development.

Unit-IV**Financial Management in Sports**

Financial management & Preparation of budgets in Physical Education & sports in schools, Colleges and Universities - Objectives and scope of financial planning - Management of Infrastructure, finance and personal - Mechanics of purchase and audit.

Reference:

1. Bucher, C.A.(2002). Management of Physical Educational and Sports.(12th Ed.). USA :McGarw Hill Co.
2. Chakraborti, S.(2007). Sports Management. New Delhi: Friends Publication.
3. Frodick, S., &Walley, L. (2003). Sports and Safety Management. USA: A division of Reed
4. Education and Professional Publishing Ltd.
5. Govindrajulu, .N. (2005). Management of Physical Education and Sports Programme. New
6. Delhi : Friends Publication.
7. Kamlesh, M. L. (2000). Management Concepts in Physical Education and Sports. New Delhi B.V. Gupta Publication.
8. Mastoralexis, L.P., & Barr, C.A. (1998). Principles and Practice of Sports Management. Maryland: Aspen Publication.
9. Roy, S. S. (2002). Sports Management. New Delhi: Friends publication.
10. Horine., Larry. (1985). Administration of Physical Education and Sports Programmes. New York :Saundress college publication

Course No.: AEC-3**Paper-V****Course Type: Ability Enhancement courses****Course Title: English – II (As Prescribed by the University)****Credit: 03****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

Paper-VI**Course No.: SEC- 3****Course Type: Skill Enhancement Course (Practical)****Course Title: Indigenous Activities- III (Lezume, General Fitness & Aerobic Dance)****Credit: 03****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Indigenous Activities**

1. Concept of Indigenous activities.
2. History of Indigenous activities.
3. Principles and Importance of indigenous activities.
4. Various types of activities with different equipment.

Semester-IV**Paper-I****Course No.: MJD-5****Course Type: Major Disciplinary Course****Course Title: Sports Training****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning outcomes:**

1. The learners will be able to identify the fundamental concepts, theories and principles of human body training related to sports performance.
2. The learners will be able to demonstrate the skills to train different fitness components and related planning.
3. The learners will be able to understand the organization to achieve high performance in sports.

Unit-I**Introduction to Sports Training**

Importance Meaning and nature of Sports Training - Aim and Objective of Sports Training - Principles of Sports Training - Characteristics of Sports Training.

Unit-II**Training Components**

Strength - Speed - Endurance - Flexibility - Coordinative abilities

Unit-III**Load**

Principles of load and its components - Determination of Optimum load - Overload its causes and identification - Tackling Over Load.

Unit-IV**Training programming and planning**

Periodization and its types of Periodization - Aim and Content of Periods (Preparatory, Competition, Transitional period) - Planning: Meaning and types - Principles of Planning.

Reference:

1. Dick, W. F. (1980).Sports training principles. London: Lepus
2. Books. Harre, D.(1982).Principles of sports training. Berlin: Speculated.
3. Jensen, R. C.& Fisher, A.G. (1979). Scientific basis of athletic conditioning. Philadelphia: Lea and Fibiger, 2ndEdn.
4. Mathyew, L.P. (1981).Fundamental of sports training. Moscow: Progress Publishers.
5. Singh, H. (1984).Sports training, general theory and methods. Patiala: NSNIS.
6. Uppal, A.K., (1999).Science of Sports Training. New Delhi: Friends Publication.
7. SchlichMonfred(2003), Circuit Training for all sports, sports book publisher Toronto.
8. Dr. Sharad Chandra Mishra 92006), Sports Training, Sports Publication.

Paper-II**Course No.: MJD-6****Course Type: Major Disciplinary Course****Course Title: Test & Measurement in Physical Education****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Outcomes**

1. The students will be able to recognize and relate the concept of test, measurement and evaluation in the context of Physical Education.
2. The students will be able to construct and conduct the physical fitness and sports skill test.
3. The students will be able to implement the criteria of test selection.

Unit-I**Introduction to Test & Measurement & Evaluation**

Meaning of Test, Measurement & Evaluation in Physical Education - Importance of Test, Measurement & Evaluation in Physical Education - Criteria of selecting an appropriate test - Type and classification of test.

Unit-II**Construction and Administration of Test**

Administration of testing programme - Construction of Physical Fitness / Efficiency Test - General types of sports skill test items - Construction of sports skill test.

Unit-III**Physical Fitness Tests**

Youth Physical Fitness Test - Tuttle Pulse Ratio Test - Newton Motor Ability Test - Phillips JCR Test.

Unit-IV**Sports Skill Tests**

Lockhart and McPherson Badminton test - Johnson Basketball test - McDonald soccer test - S.A.I Hockey test.

References:

1. Bangsbo, J. (1994). Fitness training in football: A scientific approach. Bagsvaerd, Denmark:Ho+Storm.
2. Barron, H. M., &Mchee, R. (1997). A practical approach to measurement in physical education.Philadelphia: Lea and Febiger.
3. Barron, H.M. &Mchee, R. (1997). A Practical approach to measurement in physical education.Philadelphia: Lea and Febiger.
4. Kansal, D.K. (1996). Test and measurement in sports and physical education. New Delhi:D.V.S. Publications

Paper-III**Course No.: MJD- 7****Course Type: Major Disciplinary Course****Course Title: Athletics (Track & Field Events) & Indigenous Activity (Pyramid, Lagori, Hoops) Practical****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

1. History and Development of the Track and field at International and National level.
2. Basics of Athletic Track (200 & 400 Mt Track).
3. Preparation of Track & Field area
4. Marking of Track & Field events, various zones, starting points etc.
5. Events, their process, timing and scorings.
6. Fundamental skills related to all the events.
7. Tests (for speed and endurance) and their administration.
8. National and international organizations / federations of the Athletics.
9. Rules and their interpretations in relation to Track & Field events.
10. Selection of athlete and coaching of events.
11. Officiating & Referee / Umpire /scorer /curatorship for self-employment.

Indigenous Activities

5. Concept of Indigenous activities.
6. History of Indigenous activities.
7. Principles and Importance of indigenous activities.
8. Various types of activities with different equipment.

Paper-IV**Course No.: MID-4****Course Type: Minor Disciplinary Course****Course Title: Athletics (Track & Field Events) Theory****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Unit - I**

History of Track and Field: India, Asia, and World - Organisation of Track and Field - Federations: India, Asia, World

Unit - II

Fundamental Skill- Lead Up Games - Various System of Play - Selection of Players.

Training: Warm-up and Warm down - Technical Training - Tactical Training - Coaching Program.

Unit - III

Layout of Track & field events with all Measurements - Facilities and equipment and its specifications.

Unit - IV

Rules and their Interpretation, Methods of Officiating, Duties of Officials - Major Competitions of Athletics

Paper-V**Course No.: AEC- 4****Course Type: Ability Enhancement courses****Course Title: Tamil/Telugu/Hindi/Malayalam/French – II****(As Prescribed by the University)****Credit: 03****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

Paper-VI**Course No.: Project****Course Type: WP/ Internship****Course Title: Community Engagement****Credit: 02****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

As per the UGC guidelines all UG students should be exposed to 4 to 6-week Summer Internship in industrial organisation/Training Labs/Research Institutions/Educational Institutions etc. Such Summer Internship is proposed to be conducted in between 4th Semester and 5th semester. A review report and award of grade based on practical skills learned by students during the 5th Semester will be given.

Semester-V
Paper-I

Course No.: MJD- 8

Course Type: Major Disciplinary Course

Course Title: Sports Psychology

Credit: 04

Max. Marks: 100

Sessional Marks: 40

End semester exam marks: 60

Learning outcomes:

1. The study would orient the student in basic concepts of psychology.
2. The student would be oriented in identifying factors determining one's overall personality.
3. He would understand various laws of learning and their relevance in teaching learning process.
4. The study would orient him in getting through with the psychology of sports person.

Unit-I

Introduction of Sports Psychology

Meaning and nature of Sports Psychology - Historical Evolution of Sports Psychology - Relevance of Sports Psychology in Physical Education and coaching - Psychological factors affecting sports performances.

Unit-II

Personality and Sports:

Meaning and nature of Personality - Theories of personality in sports - Dimensions of personality and development of personality

Motivation

Types of motivation and condition of developing achievement motivation.

Unit-III

Learning

Meaning nature and principles of Learning, Types of Learning - Laws of learning, Transfer of learning - Factors affecting learning - Learning curve, Plateau

Unit-IV

Sports Sociology and Leadership:

Nature of Sports Sociology - Importance of Sports Sociology in Physical Education - Socialization and value education through Physical Education - Impact of society on sports and vice versa.

Reference:

1. Alison and Robinson. (2018), *Excelling in Sport Psychology: Planning, Preparing, and Executing Applied Work*, Sean Fitzpatrick
2. Taylor, Jim, (2018), *Assessment in Applied Sport Psychology*, Human kinetics
3. Coumbe-Lilley , (2018), *Complex Cases in Sport Psychology*, Routledge
4. Ball, D. W. & Loy, J. W. (1975). *Sport and social order; Contribution to the sociology of sport*. London: Addison Wesley Publishing Co., Inc.
5. Kamlesh, M.L. (1998). *Psychology in physical education and sport*. New Delhi: Metropolitan Book Co.
6. Book Co.
7. Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1978). *Sport and social system*. London: Addison Wesley Publishing Company Inc.
8. Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1981). *Sports culture and society*. Philadelphia: Lea & Febiger.
9. Skinnner, C. E., (1984.). *Education psychology*. New Delhi: Prentice Hall of India.

Paper-II**Course No.: MJD- 9****Course Type: Major Disciplinary Course****Course Title: Talent Identification in Sports****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Outcomes**

1. The student would be oriented with the inherited signs and symptoms that make one adept for excellence in a particular sports.
2. The student would be able to quantify those signs and symptoms through specific tools and techniques and thus guide the individual to that sports activity for which his/her physique is best suited

Unit-I**Introduction, Meaning, Concept and scope of talent identification in sports**

Need and Importance of talent identification - Principles of talent identification - Scope of Talent identification - Role of Physical Education teacher / coach in talent identification.

Unit-II**Understanding Human Body**

Genetics and Environment and their role in sports performance - Body types and their relation to sports - Basic Anthropometry - Anthropometric assessment and data recording

Unit-III**Skill tests for Ball games**

Skill tests for Ball games –Football, Basketball, Volleyball, Handball - Psychological tests related to sports abilities.

Unit-IV

Skill Tests for talent identification

Skill test for Racket games – Badminton, Hockey, Tennis, Table Tennis- Skill test for Athletic abilities.

Reference:-

1. Russell K. Athletic talent: from detection to perfection. *Sci Period Res Technol Sport* 1989; 9 (1): 1–6Google Scholar
2. Williams AM, Reilly T. Talent identification and development in soccer. *J Sport Sci* 2000; 18 (9): 657–67
3. Bartmus U, Neumann E, de Marées H. The talent problem in sports. *Int J Sports Med* 1987; 8 (6): 415–6
4. Barron, H.M. & Mchee, R. (1997). *A Practical approach to measurement in physical education*. Philadelphia: Lea and Febiger.
5. Kansal, D.K. (1996). *Test and measurement in sports and physical education*. New Delhi:D.V.S. Publications

Paper-III**Course No.: MJD- 10****Course Type: Major Disciplinary Course****Course Title: Sports Injuries and Rehabilitation****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Outcomes**

1. He would understand the Prevention, Treatment and Rehabilitation of Athletic Injuries.

Unit-I**Sports Injuries Care, Treatment and Support:**

Common athletic injuries - Types of Wound, exposed and unexposed- Sprain -Strain and their treatment -Types of fracture and their treatment - Dislocation

Principles for Prevention of Sports Injuries - Care and Treatment of Exposed and Unexposed Injuries in Sports - Principles of apply Cold and Heat, Infrared Rays, Ultrasonic Therapy, Short-wave Diathermy Therapy - Principles and Techniques of Strapping and Bandages.

Unit-II**Corrective Physical Education:**

Definition and Objectives of Corrective Physical Education - Posture and Body Mechanics - Value of Good Posture, Drawbacks and Causes of Bad Posture - Posture Test – Examination of the Spine.

Unit-III**Postural Deformities and Rehabilitation Exercises:**

Normal Curve of the Spine and its Utility - Deviations in Posture- Kyphosis, Lordosis, Flat Back, Scoliosis, Round Shoulders, Knock Knee, Bow Leg, Flat Foot - Causes for Deviations and Treatment Including Exercises - Passive, Active, Assisted, Resisted Exercise for Rehabilitation.

Unit-IV**Massage:**

Brief History of Massage, Massage as an Aid for Relaxation, Principles of Massage - Effects of Massage, Indication /Contra Indication of Massage - Classification of the Manipulation used Massage and their Specific Uses in the Human Body - Stroking Manipulation, Effleurage, Pressure Manipulation, Percussion Manipulation, Cupping, Poking, Shaking Manipulation, Deep Massage.

Note: Each student shall submit Physiotherapy record of attending the Clinic and observing the cases of athletic injuries and their treatment procedure (To be assessed internally).

References:

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

Paper-IV**Course No.: MID-5****Course Type: Minor Disciplinary Course****Course Title: Major Games- IV (Gymnastics, Archery & Taekwondo)****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

1. History and Development of the game at International and National level.
2. Dimensions and marking of playing area.
3. Basic requirements of the playing area.
4. Fundamental skills of the game.
5. Skill tests, scoring and arrangement of the skill tests.
6. National and international organizations / federations of the game.
7. Rules of the game with their interpretations.
8. Team selection and coaching in that game.
9. Officiating & Referee / Umpire /scorer /curatorship for self-employment.

Paper-V**Course No.: SKD****Course Type: Major Disciplinary Course****Course Title: Summer Internship****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

As per the UGC guidelines all UG students should be exposed to 4 to 6-week Summer Internship in industrial organisation/Training Labs/Research Institutions/Educational Institutions etc. Such Summer Internship is proposed to be conducted in between 4th Semester and 5th semester. A review report and award of grade based on practical skills learned by students during the 5th Semester will be given.

Semester-VI**Paper-I****Course No.: MJD- 11****Course Type: Major Disciplinary Course****Course Title: Sports Nutrition & Health Education****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning outcomes:**

1. Will develop skills to establish daily caloric requirement and to design the diet plan.
2. Will acquaint student with principles of sports nutrition.
3. Will orient the student to the role of food on Physical performance.
4. Would make the student understand and prepare weight management plans.

Unit-I**Introduction to Sports Nutrition**

Meaning and Definition of Sports Nutrition - Basic components of Nutrition - Balance diet and its components, Nutritional deficiencies - Understanding of malnutrition and nutritional supplements.

Unit-II**Nutrients: Ingestion to energy metabolism**

Carbohydrates, Protein, Fat – Meaning, classification and its function - Role of carbohydrates, Fat and protein during exercise - Vitamins, Minerals, Water – Meaning, classification and its function - Role of hydration during exercise - Concept of BMI (Body mass index).

Unit-III**Health Education**

Meaning - Definition of Health Education – Aim, Scope of Health Education- role of International Organizations (WHO, UNICEF), National, State Level Health Organizations.

Unit-IV**Diseases**

Communicable Diseases - Causes, modes of spread – Prevention of Tuberculosis, Malaria, Dengu, small pox, Chicken pox, Covid 19 and AIDS- Non- communicable diseases- Diabetes, Obesity, BP, Cancer

References:

1. Bessesen, D. H. (2008). Update on obesity. *J ClinEndocrinolMetab.*93(6), 2027-2034.
2. Butryn, M.L., Phelan, S., & Hill, J. O. (2007). Consistent self-monitoring of weight: a key component of successful weight loss maintenance. *Obesity*(Silver Spring). 15(12), 3091-3096.
3. Chu, S.Y. & Kim, L. J. (2007). Maternal obesity and risk of stillbirth: a metaanalysis. *Am J ObstetGynecol*, 197(3), 223-228.
4. DeMaria, E. J. (2007). Bariatric surgery for morbid obesity. *N Engl J Med*,356(21), 2176-2183.
5. Dixon, J.B., O'Brien, P.E., Playfair, J. (n.d.). Adjustable gastric banding and conventional therapy for type 2 diabetes: a randomized controlled trial. *JAMA.* 299(3), 316-323.
6. Bates M. (2008). *Health Fitness Management (2nd Ed.)* USA: Human Kinetics.
7. Fink, H.H., Burgoon, L.A., & Mikesky, A.E. (2006). *Practical Applications in Sports Nutrition.* Canada : Jones and Bartlett Publishers.
8. Lancaster S. & Teodoro, R. (2008). *Athletic Fitness for Kids.* USA: Human Kinetics.
9. Michael J. Gibney (2002) – *Human Nutrition*, Atlantic publication, New Delhi.
10. Martin Estwood (2005) – *Principle of human nutrition*, Atlantic publication, New Delhi.

Paper-II**Course No.: MJD- 12****Course Type: Major Disciplinary Course****Course Title: Adapted Physical Education****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning outcomes:**

The knowledge would enable the students to understand the activity requirements of various levels of physically challenged persons.

2. The knowledge would thus enable the students to prepare and organize worthwhile activity programs for various levels of physically challenged persons.

Unit-I**Introduction**

Meaning, Definition of Adapted Physical Education and Sports - Purpose, Aims and Objectives of Adapted Physical Education and Sports - Program organization of Adapted Physical Education and Sports - Adapted Sports- Para Olympics and other Opportunities.

Unit-II**Development of Individual Education Program (IEP)**

The student with a disability - Components and Development of IEP - Role of Physical Education teacher in Adapted Physical Education.

Unit-III**Developmental Considerations of an Individual**

Motor development - Perceptual Motor development - Early childhood and Adapted Physical Education - Teaching style, method and approach in teaching Adapted Physical Education.

Unit-IV**Individual with unique need and activities**

Behavioral and Special learning disability - Visual Impaired and Deafness - Health Impaired students and Physical Education - HRPF and its development for Individual with unique need - Role of games and sports in Adapted Physical Education.

Reference:

1. Beverly, N. (1986). Moving and Learning. Times Mirror/Mosby College Publishing.
2. Cratty, B.J. Adapted Physical Education in the Mainstream. (4th Edition) Love Publishing Company.
3. Houser, L.D. Integrated Physical Education- A guide for the elementary classroom teacher.
4. Winnick, J. P. (2005). Adapted Physical Education and Sports. Human Kinetics (4th Edition). Pangrazi, R.P. and Dauer, V. P. Dynamics Physical

Paper-III

Course No.: MJD-13

Course Type: Major Disciplinary Course Course Title: Sports Engineering

Credit: 04

Max. Marks: 100

Sessional Marks: 40 End semester exam marks: 60

Paper-IV**Course No.: MJD-14****Course Type: Major Disciplinary Course****Course Title: Sports Journalism****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Outcomes**

1. The students will be oriented in basic art of mass communication and reporting of sports events through various mediums.

Unit-I**Introduction**

Meaning and Definition of Journalism - Ethics of Journalism - Sports Ethics and Sportsmanship - Reporting Sports Events - National and International Sports News Agencies.

Unit-II**Sports Bulletin**

Concept of Sports Bulletin - Types of bulletin - Journalism and sports education - Structure of sports bulletin – Compiling a bulletin - General news reporting and sports reporting.

Unit-III**Mass Media**

Mass Media in Journalism: Radio and T.V. - Commentary (Running commentary on the radio, Sports expert's comments) - Role of Advertisement in Journalism - Sports Photography - Editing and Publishing.

Unit-IV**Report Writing on Sports**

Brief review of Olympic Games, Asian Games, Common Wealth Games World Cup, National Games and Indian Traditional Games - Preparing report of an Annual Sports Meet for Publication in Newspaper - Organization of Press Meet - Practical assignments to observe the matches and prepare report and news of the same - Visit to News Paper office and TV Centre to know various departments and their working.

Reference:

1. Ahiya B.N. (1988) Theory and Practice of Journalism: Set to Indian context Ed3. Delhi: Surjeet Publications
2. Ahiya B.N. Chobra S.S.A. (1990) Concise Course in Reporting. New Delhi: Surjeet Publication
3. Bhatt S.C. (1993) Broadcast Journalism Basic Principles. New Delhi. Haranand Publication
4. Dhananjay Joshi (2010) Value Education in Global Perspective. New Delhi: Lotus Press.
5. Kannan K (2009) Soft Skills, Madurai: Madurai: Yadava College Publication
6. MohitChakrabarti (2008): Value Education: Changing Perspective, New Delhi: Kanishka Publication,
7. Padmanabhan. A &Perumal A (2009), Science and Art of Living, Madurai: Pakavathi Publication
8. Shiv Khera (2002), You Can Win, New Delhi: Macmillan India Limited.
9. Varma A.K. (1993) Journalism in India from Earliest Times to the Present Period. Sterling publication Pvt. Ltd.
10. Venkataiah. N (2009) Value Education,- New Delhi: APH Publishing Corporation.

Course No.: MID-6

Course Type: Minor Disciplinary Course (Practical)

Course Title: Indigenous Activities- III (Silambam, Karate & Zumba)

Credit: 03

Max. Marks: 100

Sessional Marks: 40

End semester exam marks: 60

Indigenous Activities

9. Concept of Indigenous activities.
10. History of Indigenous activities.
11. Principles and Importance of indigenous activities.
12. Various types of activities with different equipment.

Semester-VII**Paper-I****Course No.: MJD- 15****Course Type: Major Disciplinary Course****Course Title: Sports Medicine****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Objectives**

1. The goal of a sports medicine is to help the student engage in exercise safely and effectively in order to achieve their training goals.
2. To provide knowledge about the causes of injuries.
3. To provide means or treatment for sports injuries and for rehabilitation of injuries.
4. To provide knowledge about the preventive measures of sports injuries.
5. To aware the student about the treatment procedure of different kinds of injury.

UNIT I - Introduction

Meaning and Definition of Sports Medicine, Definition and Principles of Therapeutic Exercises. Injuries: Acute, Sub-acute, Chronic. Advantages and Disadvantages of PRICE, PRINCE therapy. Preventive, Curative and Rehabilitation Aspects of Sports Injuries.

UNIT II - Basic Rehabilitation and Therapeutic Modalities

Basic Rehabilitation: Bandages, Strapping and Tapping: Role of Sports Rehabilitation, Classification of Rehabilitation. Therapeutic Modalities –Cold Modalities (Cryotherapy)- Principles of Modalities –Ice Massag –Ice Packs – Ice Immersion and Cold Whirlpool –Cry Stretch –Chemical Packs –Ice Compression. Heat Modalities (Thermotherapy)-

Effects of Heat Applications-Infrared Lamp-Moist Heat Packs –Paraffin Wax Bath- Contrast Bath - Sona Bath. Electrotherapy - Basic Principles of Electrotherapy (Therapeutic Effects)-Electrical Stimulator –Short Wave Diathermy-Microwave Diathermy –Ultrasound-Neuromuscular Electrical Stimulator –Interferential Current –Transcutaneous Nervous Stimulator (TENS) - Ultraviolet Therapy-Lasser.

UNIT III - Spine Injuries and Exercise

Head, Neck and Spine Injuries: Causes, Presentational of Spinal Anomalies, Flexion, Compression, Hyperextension, Rotation Injuries. Spinal Range of Motion. Rehabilitation Exercises for Spinal Injuries- Head, Neck and Spine. Supporting and Aiding Techniques and Equipment for Head, Neck and Spine Injuries.

UNIT IV - Upper Extremity Injuries and Exercise

Upper Limbs and Thorax Injuries - Shoulder: Sprain, Strain, Dislocation, and Strapping. Elbow: Sprain, Strain, Strapping. Wrist and Fingers: Sprain, Strain, Strapping. Thorax, Rib Fracture. Rehabilitation Exercise for Upper Extremity Injuries - Shoulder, Elbow, Wrist and Hands. Supporting and Aiding Techniques and Equipment for Upper and Thorax Injuries.

UNIT V - Lower Extremity Injuries and Exercise

Lower Limb and Abdomen Injuries: Hip: Adductor Strain, Dislocation, Strapping. Knee: Sprain, Strain, Strapping. Ankle: Sprain, Strain, Strapping. Abdomen: Abdominal Wall, Contusion, Abdominal Muscle Strain. Rehabilitation Exercise for Lower Extremities-Hip, Knee, Ankle, Foot and Abdomen.

REFERENCES:

1. Christopher M. Norris (1993), Sports Injuries Diagnosis and Management for Physiotherapists. East Kilbride: Thomson Litho Ltd.
2. G. Vinod Kumar (2015). Sports Medicine and Injuries Management. Kongunadu Publications India Ltd.
3. James, A. Gould & George J. Davies. (1985). Physical Physical Therapy. Toronto: C.V. Mosby Company.
4. Morris B. Million (1984). Sports Injuries and Athletic Problem. New Delhi: Surjeet Publication.
5. Pande (1998). Sports Medicine. New Delhi: KhelShitya Kendra.
6. Practical: Anthropometric Measurements.

Paper-II**Course No.: MJD- 16****Course Type: Major Disciplinary Course****Course Title: Sports Entrepreneurship****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Outcomes**

The knowledge would enable students to set up their own enterprise, catering to various demands of sports industry.

Unit-I

Meaning and Definition of Entrepreneurship - Concept and characteristics Entrepreneurship - Need and Importance of entrepreneurship in sports - Understanding Sports Business industry.

Unit-II

Understanding the entrepreneurial process - Types of Entrepreneurs - Risk and Rewards in entrepreneurship - Leading sports companies and media channels.

Unit-III

Identifying the areas of business - Understanding financial aspects of the business - Government and private Organizations supporting entrepreneurs in India - Generating / arranging funds for the business.

Unit-IV

Entrepreneurship in the sports Goods / Equipment - Entrepreneurship in Sports wears - Entrepreneurship in Sports management / Event management - Entrepreneurship in Sports software/fitness / Nutrition.

Reference:-

1. Peter Thiel, Zero to One: Notes on Start Ups, or How to Build the Future, 0804139296 (ISBN13: 9780804139298)
2. Guy Kawasaki (2004), The Art of the Start: The Time-Tested, Battle-Hardened Guide for Anyone Starting Anything, 1591840562 (ISBN13: 9781591840565)
3. Roger Cowdrey, Creating an Entrepreneurial Mindset-Failure IS an Option!

*****.

Paper-III**Course No.: MJD- 17****Course Type: Major Disciplinary Course****Course Title: Sports Technology****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Objectives**

1. To understand the procedure of selection and use of various sports technologies.
2. To learn the method of construction and installation of sports surface
3. Help to improve knowledge about modern playing equipment

UNIT I – Sports Technology

Meaning, definition, purpose, advantages and applications, 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, closedcell and open-cell foams, Neoprene, Foam. Smart Materials – Shape Memory Alloy (SMA), Thermo chromic film, High-density modelling foam.

UNIT III – Surfaces of Playfields

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

UNIT IV – Modern equipment

Playing Equipments: Balls: Types, Materials and Advantages, Bat/Stick/ Racquets: Types, Materials and Advantages. Clothing and shoes: Types, Materials and Advantages. Measuring equipments: Throwing and Jumping Events. Protective equipments: 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 Flood Light and measuring

luminous. Video Coverage: Types, Size, Capacity, Place and Position of Camera in Live coverage of sporting events.

REFERENCE:

1. Charles J.A. Crane, F.A.A. and Furness, J.A.G. (1987) "Selection of Engineering Materials" UK: Butterworth Heiremann.
2. Finn, R.A. and Trojan P.K. (1999) "Engineering Materials and their Applications" UK: Jaico Publisher.
3. John Mongilo, (2001), "Nano Technology 101 "New York: Green wood publishing group.
4. Walia, J.S. Principles and Methods of Education (Paul Publishers, Jullandhar), 1999.
5. Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jullandhar, Sterling Publishers Pvt. Ltd.), 1982.
6. Kozman, Cassidy and Jackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

Paper-III**Course No.: MID- 7****Course Type: Major Disciplinary Course****Course Title: Recreation & Camping****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Unit- I**

Recreation: Definition, Scope and Significance – Philosophy and Objectives – Relationship of Play, Work, Leisure and Recreation.

Unit- II

Agencies Offering Recreation – Home, Governmental, Voluntary, Private and Commercial Agencies.

Unit- III

Camping - Scope and Significance of Camping-Types of Camps-Selection and lay-out of camp sites.

Unit- IV

Camp Programme and Activities – Arts and Crafts, Dramas, Music, Hobbies, Dancing, Hiking, Map. Meaning of leadership-Quality of a good leader-Physical Education teacher as leader.

Reference Books:

1. VeenaVerma “Organization & Administration in Physical Education”, pub Lokeshthani sports. (2003)
2. Mrs. SushilGosain “Sports Management (1991, 2002)
3. Yadrindersingh “Sports Management”, Llakshay pub (2005)
4. K. Chandrashekar “Sports Administration”, VinekThaniKnelSahitya Kendra pub., (2004)
5. JaemsG.NasonJimpaul “Modern Sports Administration”, Pub prentice Hall.(1998)
6. Wiles, brown and Cassidy ,) Supervision in Physical Education Engle wood Cliffs , N.J.: Prrntice – Hall . (1956
7. Scott and Westhaomper,, From Program to facilities in Physical Education . New york: Harper & bros . (1958).

Paper-IV**Course No.: MID- 8****Course Type: Major Disciplinary Course****Course Title: Educational Tour****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60**

Students will visit a few Universities/Institutions of the different states of the country to do survey on availability of sports infra-structure in concerned universities/institutions, and submit an individual project report of 02 credits and will be assessed by a viva voce of 02 credits.

Semester-VIII**Paper-I****Course No.: MJD- 18****Course Type: Major Disciplinary Course****Course Title: Research Methodology in Physical Education****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Objectives:**

- Introduce Research and its various aspects to the learner
- Give an overview of the types of Research
- Give a clear understanding of the sampling techniques
- To provide an understanding on writing a Research Proposal and Report

Unit- I**Introduction**

Meaning and Definition of Research – Need, Nature and Scope of research in Physical Education. Classification of Research, Location of Research Problem, Criteria for selection of a problem, Qualities of a good researcher.

Unit- II**Methods of Research**

Descriptive Methods of Research; Survey Study, Case study, Introduction of Historical Research, Steps in Historical Research, Sources of Historical Research: Primary Data and Secondary Data, Historical Criticism: Internal Criticism and External Criticism.

Unit- III**Experimental 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.

Unit- IV

Sampling

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

Unit- V

Research Proposal and Report

Chapterization of Thesis / Dissertation, Front Materials, Body of Thesis – Back materials. Method of Writing Research proposal, Thesis / Dissertation; Method of writing abstract and full paper for presenting in a conference and to publish in journals ,Mechanics of writing Research Report, Footnote and Bibliography writing.

REFERENCE:

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

Paper-II**Course No.: MJD- 19****Course Type: Major Disciplinary Course****Course Title: Application of Statistics in Physical Education****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning Objectives**

1. Gain knowledge about statistics
2. To testing the existing theories/trainings and modifying
3. To develop systematic and scientific approach
4. Ability to interpret the data's

Unit- I**Introduction**

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.

Unit- II**Data Classification, Tabulation and Measures of Central Tendency**

Meaning, uses and construction of frequency table. Meaning, Purpose, Calculation and advantages of Measures of central tendency – Mean, median and mode.

Unit- III**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.

Unit- IV**Probability Distributions and Graphs**

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

Unit- V**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.

REFERENCE

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

Paper-III

Course No.: MID

Course Type: Major Disciplinary Course

Course Title: Research Project

Credit: 12

Max. Marks: 100

Sessional Marks: 40

End semester exam marks: 60

All UG students seeking an UG (Hons) Degree are expected to conduct a semester long Research during their 8th Semester and submit a Research Report. Departments/Schools may attach students to different faculty members for necessary guidelines in identifying the researchable problem, Literature review, field study, if any, model development, data processing and preparation of a Project Report. All these Research Works be evaluated by a Jury of 3 senior faculties at different stages. A presentation and viva may be made mandatory for greater quality and discipline.

Paper-III**Course No.: MJD- 20****Course Type: Major Disciplinary Course****Course Title: Sports Sociology (*optional for 8th semester)****Credit: 04****Max. Marks: 100****Sessional Marks: 40****End semester exam marks: 60****Learning outcomes:**

1. The pass out would be able to compare the relationship between sociology and physical education.
2. He would be able to identify and relate with the features of Indian Society.
3. He would be able to comprehend the relationship between Culture and civilization.
4. He would know recent developments and academic foundation of sociology in Physical Education.

Unit-I

Sociology and its basic concepts: Nature, scope and methods of sociology, Society, Community, associations, institutions, customs and folkways, values and norms. Biological factors – Role of heredity and environment, race prejudice

Unit-II

Main features of Indian Society: Religious pluralism (Hinduism, Islam & Christianity) Linguistic Pluralism Indian Policy – Secularism, Democracy, Social Justice. Socialization, Nature and techniques of social control and their social consequences: Origin of the Community and Origin and growth of culture, individual and culture, Culture and civilization.

Unit-III

Introduction to sports sociology Nature and scope, Aim, Values of sports in the society, Influence of society on sports and vice- versa. Sports and Mass Media, Sports and Politics, Socio- Economic factors in sports.

Unit-IV

Concept of personality and influence of group and culture in its formation. Social and cultural change : concept and factors of social change, sports as social phenomenon and a cultural product : Sports and Socialization.

References:

1. Iver M.C. Society, London : MC Millan Co. 1962
2. Oghburn, William F and Ninkoff, Meyer F, Hand Book of Sociology, New Delhi Eurasia Publishing House 1964.
3. Mukherjee D.P. Sociology and Indian Culture: Jaipur. Rawat publications, 1979.
4. DASAT.A.R. Rural Sociology in India. Bombay : Popular Prakashan Private Ltd. 1969
5. Loy Jr. John W. Kenyon, Gerald and Mcpherson, Barry S. Sports Culture and Society. Philadelphia – Lea and Febiger, 1968.
6. Phomaryoy N.I. Sports and Society. Moscow : Progress Publishers 1981

Nagaland University- BPES NEP Syllabus

Appendix - I

PHYSICAL FITNESS TEST (QUALIFYING)			
	Male		Female
(a)	100 mts	(a)	100 mts
(b)	Shot put (16 lbs)	(b)	Shot put (8 lbs)
(c)	Broad Jump.	(c)	Broad Jump.
(d)	Vertical Jump.	(d)	Vertical Jump.
(e)	12 minutes run and walk.	(e)	8minutes run and walk.

Appendix – II

(a)	National/All India Inter Zonal/ National Games /Inter-State/Federation Cup/ Junior National/School Nationals/Rural National/Khelo India etc.		
	Ist Position	15 Marks	
	IIInd Position	12	
	IIIrd Position	10	
	National Participation	08 Marks	
(b)	State championships		
	Ist Position	07 Marks	
	IIInd Position	06 Marks	
	IIIrd Position	04 Marks	
	State Participation	03 Marks	
(c)	District Level Tournaments		
	Ist Position	03 Marks	
	IIInd Position	02 Marks	
	IIIrd Position	01 Marks	

(d)	Inter School/Zonal Participation	Minimum level of participation for admission in the course	
	(a) Tournaments mentioned must be approved by Indian Olympic Association/School Games Federation of India/Govt. of India.		
	(b) The level of Competency in the Sports will be determined only if the candidate has achieved distinctions in sports during the last eligible three years. Participating given above is the order of preference for admission in all the courses.		
	(c) KVS, <u>CBSE</u> , Navodaya cluster and regional is equivalent to district level whereas KVS (National)/CBSE National/Navodaya National is equal to state Level.		
	(d) In case any candidate is holding the National participation certificate, it must be supported by certificate of participation at state level or position secured at the Inter-Zonal Competition of the same (respective) game.		
	(e) Position holder of the state championships must be considered with their supporting certificate/ authentication at district level or zonal level or an equivalent level position.		