SYLLABI AND SCHEME OF EXAMINATIONS FOR SKILL ENHANCEMENT COURSES (SEC) FOR UNDERGRADUATE PROGRAMES (SINGLE MAJOR) IN B.SC SPORTS SCIENCE

(Based on Curriculum and Credit Framework guidelines for UG Programs under NEP 2020)

MAHARSHI DAYANAND UNIVERSITY ROHTAK (HARYANA)

Syllabi and Scheme of Examinations for Skill Enhancement Courses (SEC) of Under Graduate Single Major in B.Sc Sports Science

Skill Enhancement Courses (SEC)	TYPE OF PROGRAM			Credits Distribution			Total Credits	Workload			Total Workload	Total Marks
	SINGLE MAJOR PROGRAM / SEMESTER	Nomenclature of Course	Course Code	L	T	P		Formative Assessment	T	P		Internal Assessment
SEC 1 @ 3 credits	1	Track and Running Skills	**24PES401SE01**	0	0	3	3	0	0	6	6	75
SEC 2 @ 3 credits	2	Fundamentals of Jumping	**24PES402SE01**	0	0	3	3	0	0	6	6	75
SEC 3 @ 3 credits	3	Basics of Throwing	**25PES403SE01**	0	0	3	3	0	0	6	6	75
SEC 3 @ 2 credits	6	Basics of Combined Events	**26PES406SE01**	0	0	2	2	0	0	4	4	50

L: Lecture; T: Tutorial; P: Practical

Syllabi for Skill Enhancement Courses (SEC)
Under Graduate Programs for(Single Major)in B.Sc Sports Science
Semester: I

Name of Program	B.Sc. (Sports Science)	**Program Code**	USSS4
Name of the Course	Track and Running Skills	**Course Code**	24PES401SE01
Hours per Week	06 Hours	**Credits**	03 (L: 0, T: 0, P: 3)
Maximum Marks	75 Internal		

Note: Distribution of Marks will be as follows:

Regular assessment through observation and class discussion:	10
Lab work (practical file)/ Field work 9report0/ Portfolio:	30
Assessment/ Case study/ Mini project (2x10):	20
Seminar/ Presentation:	10
Attendance:	05
Total:	75

Course Learning Outcomes (CLO):

CLO 1: Students will be able to identify the layout, lanes, lines, and follow basic track rules for safe usage.

CLO 2: Students will be able to start, sprint, and finish short-distance races effectively with proper posture and technique.

CLO 3: Students will be able to maintain a steady pace, use proper breathing techniques, and complete medium-distance races with ease.

CLO 4: Students will develop endurance, pacing strategies, and mental discipline to complete long-distance races successfully.

Unit 1: Athletic Track

- Understanding the oval shape and layout of a standard 400m track.
- Learning how lanes are marked and how to identify lane numbers.
- Recognizing starting and finishing lines, and understanding staggered starts for 200m and 400m races.
- Learning the basic rules and safety measures for using the track.

Unit 2:Short Distance Races

- Practicing standing and crouch start techniques for 100m, 200m, and 400m.
- Learning the correct running form, focusing on posture, arm action, and leg movement.
- Doing simple sprint drills to improve speed and explosiveness.
- Practicing how to lean forward and finish the race strongly at the finish line.

Unit 3: Medium Distance Races

- Learning proper warm-up exercises and stretches before running.
- Practicing running at a steady and consistent pace for 800m and 1500m races.

- Learning how to control breathing during medium-distance races to conserve energy.
- Practicing proper cool-down exercises after running, including light jogging and stretching.

Unit 4: Long Distance Races

- Running drills to build endurance and stamina for long-distance races.
- Learning how to pace oneself effectively during long races to avoid exhaustion.
- Understanding the importance of hydration and nutrition before, during, and after long-distance running.
- Learning how to stay mentally focused and disciplined during long-distance runs.

References:

1. Brundel, E., & Whitehead, M. (2019). Track and field coaching essentials. Human Kinetics.
2. Moran, A. P. (2012). Sport and exercise psychology: A critical introduction (2nd ed.). Routledge.
3. Jarver, J. (2009). Sprints & relays: Contemporary theory, technique and training. Tafnews Press.
4. Noakes, T. D. (2003). The lore of running (4th ed.). Human Kinetics.
5. Freeman, W. (2010). Track & field coaching manual (3rd ed.). Human Kinetics.
6. McGee, R. (2003). The complete book of track and field drills. Coaches Choice.
7. Wilt, F. (1990). Run better, run faster: A guide to sprinting and distance running techniques and training. Tafnews Press.

Semester: II

Name of Program	B.Sc. (Sports Science)	**Program Code**	USSS4
Name of the Course	Fundamentals of Jumping	**Course Code**	24PES402SE01
Hours per Week	06 Hours	**Credits**	03 (L: 0, T: 0, P: 3)
Maximum Marks	75 Internal		

Note: Distribution of Marks will be as follows:

Regular assessment through observation and class discussion:	10
Lab work (practical file)/ Field work 9report0/ Portfolio:	30
Assessment/ Case study/ Mini project (2x10):	20
Seminar/ Presentation:	10
Attendance:	05
Total:	75

Course Learning Outcomes (CLO):

CLO 1: Students will be able to set up, execute, and evaluate a long jump with proper approach, takeoff, flight, and landing techniques, adhering to event rules.

CLO 2: Students will be proficient in setting up and performing the high jump with accurate measurements, proper approach, takeoff, bar clearance, and landing techniques.

CLO 3: Students will be able to measure, set up, and perform the triple jump with effective approach, hop, step, and jump phases, and correct landing techniques.

CLO 4: Students will gain skills in setting up, executing, and maintaining a pole vault with correct measurements, approach, pole planting, vaulting, and landing techniques.

Unit 1: Long Jump

- Measuring and understanding the standard dimensions of the long jump pit and take off board.
- Basic rules and regulations of the long jump event.
- Approach Run and Take off Techniques.
- Flight Phase and Landing Technique

Unit 2:High Jump

- Measuring and marking the high jump area, including the bar height and safety mat placement.
- Basic rules and regulations of the high jump event.
- Approach Run, Takeoff, and Jumping Angle.
- Bar Clearance (Fosbury Flop Technique) and Landing Technique

Unit 3: Triple Jump

- Measuring and marking the triple jump pit, including the hop, step, and jump zones.
- Basic rules and regulations governing the triple jump event.
- Approach Run
- Hop, Step and Jump Phases

- Focusing on proper landing techniques.

Unit 4: Pole Vault

- Measuring and setting up the pole vault area, including the vaulting box and landing mat.
- Basic rules and regulations for the pole vault event.
- Pole Carry, Approach Run and Planting the Pole
- Takeoff, Vaulting, Bar Clearance, and Landing on the Mat

References:

1. Brundel, E., & Whitehead, M. (2019). Track and field coaching essentials. Human Kinetics.
2. Moran, A. P. (2012). Sport and exercise psychology: A critical introduction (2nd ed.). Routledge.
3. Jarver, J. (2009). Sprints & relays: Contemporary theory, technique and training. Tafnews Press.
4. Noakes, T. D. (2003). The lore of running (4th ed.). Human Kinetics.
5. Freeman, W. (2010). Track & field coaching manual (3rd ed.). Human Kinetics.
6. McGee, R. (2003). The complete book of track and field drills. Coaches Choice.
7. Wilt, F. (1990). Run better, run faster: A guide to sprinting and distance running techniques and training. Tafnews Press.

Semester: III

Name of Program	B.Sc. (Sports Science)	**Program Code**	USSS4
Name of the Course	Basics of Throwing	**Course Code**	25PES403SE01
Hours per Week	06 Hours	**Credits**	03 (L: 0, T: 0, P: 3)
Maximum Marks	75 (Internal)		

Note: Distribution of Marks will be as follows:

Regular assessment through observation and class discussion:	10
Lab work (practical file)/ Field work 9report0/ Portfolio:	30
Assessment/ Case study/ Mini project (2x10):	20
Seminar/ Presentation:	10
Attendance:	05
Total:	75

Course Learning Outcomes (CLO):

CLO 1: Student will be able to demonstrate the correct techniques for throwing events like shot put, discus, javelin, and hammer throw.

CLO 2: Student will be able to apply measurement standards, safety rules, and marking procedures for all throwing areas.

CLO 3: Student will be able to identify and correct common faults in approach, grip, release, and follow-through techniques.

CLO 4: Student will be able to organize, judge, and record performance in various throwing events with accuracy and fairness.

Unit 1: Shot-Put

- Measuring and marking the shot-put circle and landing sector as per official rules.
- Briefing on basic rules and safety precautions of the shot-put event.
- Demonstration of grip, stance, and glide/rotation techniques.
- Performing shot put throws with proper angle and follow-through.
- Judging legal vs foul throws and measuring distance.

Unit 2:Discus Throw

- Marking the discus throw circle and landing zone as per standard measurements.
- Understanding the rules and safety zones of the discus event.
- Practicing grip, swing, rotation, and release techniques.
- Performing throws with proper body coordination and angle of release.
- Measurement and evaluation of performance.

Unit 3: Javelin Throw

- Measuring the runway and marking the throwing arc as per specifications.
- Learning basic rules, foul lines, and safety protocols for javelin.

- Practicing grip, approach run, and proper throwing action.
- Performing javelin throws focusing on correct angle and technique.
- Identifying and correcting common faults during practice.

Unit 4: Hammer Throw

- Marking the hammer throw circle and protective cage zone.
- Explaining the rules, safety considerations, and judging protocol.
- Practicing grip, turns, and release technique under supervision.
- Performing hammer throws with attention to balance and speed.
- Measurement and scoring as per event standards.

References:

1. Yadav, R. (2020). Athletics: Theory and Practice. New Delhi: Khel Sahitya Kendra.
2. Bhardwaj, R. (2019). Fundamentals of Track and Field Events. Meerut: Friends Publications India.
3. Meena, P. (2021). Practical Handbook of Athletics. Patiala: National Sports Books.
4. Singh, S. (2023). Techniques of Throwing Events in Athletics. New Delhi: Sports Publications.
5. Jain, V. (2022). Teaching and Coaching of Field Events. Meerut: Arya Book

Semester: VI

Name of Program	B.Sc. (Sports Science)	**Program Code**	USSS4
Name of the Course	Basics of Combined Events	**Course Code**	25PES403SE01
Hours per Week	04 Hours	**Credits**	02 (L: 0, T: 0, P: 2)
Maximum Marks	50 (Internal)		

Note: Distribution of Marks will be as follows:

Regular assessment through observation and class discussion:	10
Lab work (practical file)/ Field work (Report)/ Portfolio:	20
Seminar/ Presentation(2x7.5):	15
Attendance:	05
Total:	50

Course Learning Outcomes (CLO):

CLO 1: Student will be able to demonstrate and understand the structure and rules of combined athletic events like decathlon, heptathlon, and pentathlon.

CLO 2: Student will be able to perform selected track and field events included in combined competitions with proper technique.

CLO 3: Student will be able to calculate and evaluate point scoring based on performance in each event.

CLO 4: Student will be able to apply safety measures, measurements, and judge performances in combined event settings.

Unit 1: Decathlon (Men's Combined Event)

- Introduction to the 10 events of decathlon and their sequence.
- Demonstration & measurement of 1st day events (100m sprint, long jump, shot put, High jump and 400m).
- Demonstration & measurement of 2nd day events (110m hurdles, discus throw, pole vault, javelin throw, and 1500m run).
- Understanding the IAAF scoring tables and point calculation method.

Unit 2:Heptathlon (Women's Combined Event)

- Explanation of 7 events and their sequence in heptathlon.
- Demonstration & measurement of 1st day events (100m hurdles, high jump, shot put, and 200m run).
- Demonstration & measurement of 2nd day events (Long jump, javelin throw, and 800m run).
- Understanding the IAAF scoring tables and point calculation method.

Unit 3: Pentathlon (Modern and Traditional)

- Brief history and types: Ancient, Modern, and Athletics Pentathlon.
- Athletics pentathlon: high jump, shot put, 200m, long jump, and 800m.
- Rules and scoring system for 5-event structure.
- Difference between men's and women's formats in pentathlon.

Unit 4: Planning & Execution of Combined Events

- Roles of officials: track judge, field judge, timekeeper, and scorer.
- Demonstration of event sequencing, rest periods, and warm-up routines.
- Preparation of result sheet and scoreboard for combined events.
- Conducting a mini-trial combined event (3–5 events) with student participation.

References:

1. Rathi, R. (2022). Combined Events in Athletics. New Delhi: Sports Educational Publishers.
2. Sharma, V. (2021). Field and Track Events: A Coaching Manual. Meerut: Khel Sahitya Kendra.
3. Chauhan, S. (2023). Athletics for Physical Education. Patiala: National Sports Books.
4. Bansal, D. (2020). Comprehensive Guide to Athletics and Training. New Delhi: Friends Publications India.
5. Joshi, A. (2019). Track and Field Performance Techniques. Meerut: Arya Publishing House.