Postgraduate Certificate in Functional Assessment

Functional Movement Screening

Functional Movement Screening (FMS) is a valuable tool used by healthcare professionals and fitness experts to evaluate movement patterns and identify any dysfunctional or asymmetrical movements that could lead to injury. It involves a series of tests and exercises that assess an individual's mobility, stability, and overall movement quality. FMS helps in identifying any imbalances or weaknesses in the body, which can then be addressed through targeted exercises and corrective measures.

Key Terms and Vocabulary:

1. Mobility: Refers to the ability to move a joint through its full range of motion. Good mobility is essential for performing everyday tasks and physical activities without restrictions. Lack of mobility can lead to compensatory movements and increased risk of injury.

2. Stability: Refers to the ability to control movement and maintain proper alignment during various activities. Stability is crucial for preventing injuries and improving performance in sports and other physical activities.

3. Functional Movement: Refers to movements that are essential for daily activities, such as walking, bending, twisting, and lifting. Functional movement patterns involve multiple joints and muscles working together in a coordinated manner.

4. Screening: Refers to the process of evaluating an individual's movement patterns and identifying any dysfunctions or asymmetries. Screening helps in detecting potential risk factors for injury and developing targeted interventions to improve movement quality.

5. Assessment: Refers to the systematic evaluation of an individual's movement patterns, strength, flexibility, and balance. Assessment helps in identifying areas of weakness or imbalance that need to be addressed through specific exercises and interventions.

6. Compensatory Movements: Refers to the body's natural tendency to adapt to movement dysfunctions by using alternative muscle groups or movement patterns. Compensatory movements can lead to inefficient movement patterns and increased risk of injury.

7. Corrective Exercises: Refers to specific exercises designed to address movement dysfunctions, imbalances, or weaknesses identified during screening. Corrective exercises help in improving movement quality, reducing the risk of injury, and enhancing overall performance.

8. Functional Anatomy: Refers to the study of how the body's structure and function relate to movement. Understanding functional anatomy is essential for assessing movement patterns, identifying dysfunctions, and developing effective interventions.

9. Biomechanics: Refers to the study of how the body moves and functions mechanically. Biomechanical

principles are used to analyze movement patterns, identify faulty mechanics, and optimize movement efficiency.

10. Motor Control: Refers to the brain's ability to coordinate and control muscle contractions during movement. Motor control plays a crucial role in maintaining proper movement patterns, stability, and coordination.

11. Neuromuscular Efficiency: Refers to the ability of the neuromuscular system to produce efficient and coordinated movements. Improving neuromuscular efficiency is essential for enhancing movement quality, reducing injury risk, and optimizing performance.

12. Performance Enhancement: Refers to the process of improving an individual's movement patterns, strength, flexibility, and coordination to enhance overall performance in sports and other physical activities. Performance enhancement strategies include targeted exercises, drills, and interventions.

13. Injury Prevention: Refers to the proactive measures taken to reduce the risk of injuries during physical activities. Injury prevention strategies include screening, corrective exercises, proper warm-up, and cool-down routines, and addressing movement dysfunctions.

14. Functional Movement Patterns: Refers to coordinated movements that mimic real-life activities and involve multiple joints and muscle groups. Functional movement patterns are essential for performing daily tasks, sports, and other physical activities efficiently and safely.

15. Core Stability: Refers to the ability to maintain proper alignment and control of the trunk and pelvis during movement. Core stability is essential for preventing injuries, improving posture, and enhancing overall movement quality.

16. Proprioception: Refers to the body's ability to sense the position, movement, and orientation of its limbs in space. Proprioception plays a crucial role in balance, coordination, and movement control.

17. Dynamic Stability: Refers to the ability to maintain stability and control during dynamic movements, such as running, jumping, and cutting. Dynamic stability is essential for sports performance and injury prevention.

18. Functional Training: Refers to a training approach that focuses on improving movement patterns, strength, flexibility, and coordination to enhance performance in real-life activities. Functional training incorporates exercises that mimic everyday movements and sports-specific activities.

19. Movement Dysfunction: Refers to faulty movement patterns or compensatory movements that can lead to pain, injury, or reduced performance. Identifying and addressing movement dysfunctions is essential for improving movement quality and reducing injury risk.

20. Movement Efficiency: Refers to the ability to perform movements with minimal energy expenditure and optimal biomechanics. Improving movement efficiency helps in enhancing performance, reducing fatigue, and preventing injuries.

21. Postural Alignment: Refers to the proper alignment of the body segments during static and dynamic activities. Maintaining good postural alignment is essential for preventing injuries, reducing muscle imbalances, and improving movement quality.

22. Functional Range of Motion: Refers to the range of motion required to perform specific functional movements efficiently and safely. Improving functional range of motion is essential for enhancing movement quality, reducing injury risk, and optimizing performance.

23. Movement Screening Tools: Refers to specific tests, assessments, and tools used to evaluate movement patterns, strength, flexibility, and balance. Movement screening tools help in identifying movement dysfunctions, asymmetries, and imbalances that need to be addressed.

24. Rehabilitation: Refers to the process of restoring function, mobility, and strength after an injury or surgery. Rehabilitation programs often include corrective exercises, manual therapy, and progressive strengthening exercises to facilitate recovery and prevent future injuries.

25. Client Assessment: Refers to the initial evaluation of a client's movement patterns, strength, flexibility, and balance. Client assessment helps in identifying the client's specific needs, goals, and areas of improvement to develop a customized training program.

26. Functional Capacity: Refers to the ability to perform daily activities, sports, or physical tasks efficiently and without limitations. Improving functional capacity through targeted exercises and interventions enhances performance and quality of life.

27. Movement Analysis: Refers to the systematic evaluation of an individual's movement patterns, biomechanics, and neuromuscular control. Movement analysis helps in identifying faulty mechanics, compensatory movements, and areas of improvement.

28. Strength Training: Refers to a training method aimed at improving muscular strength, power, and endurance. Strength training is essential for enhancing performance, preventing injuries, and improving overall health and fitness.

29. Flexibility Training: Refers to a training method aimed at improving joint flexibility, range of motion, and muscle elasticity. Flexibility training helps in reducing muscle tightness, improving movement quality, and preventing injuries.

30. Balance Training: Refers to a training method aimed at improving balance, coordination, and proprioception. Balance training helps in enhancing stability, reducing the risk of falls, and improving movement control.

31. Motor Learning: Refers to the process of acquiring and refining motor skills through practice and feedback. Motor learning plays a crucial role in improving movement patterns, coordination, and performance in sports and other physical activities.

32. Functional Movement Screen (FMS): Refers to a standardized screening tool used to assess an individual's movement patterns and identify any dysfunctions or imbalances. FMS consists of seven

fundamental movement patterns that are scored based on specific criteria.

33. Y Balance Test (YBT): Refers to a dynamic balance test used to assess an individual's lower extremity strength, stability, and neuromuscular control. YBT measures the reach distance in three directions to identify any asymmetries and movement dysfunctions.

34. Single Leg Squat Test: Refers to a functional movement test used to assess an individual's lower extremity strength, stability, and control. The single leg squat test helps in identifying any compensatory movements, muscle imbalances, or weaknesses that need to be addressed.

35. Shoulder Mobility Test: Refers to a test used to assess an individual's shoulder mobility and stability. The shoulder mobility test helps in identifying any restrictions, tightness, or dysfunctions in the shoulder joint that may affect upper body movements.

36. Trunk Stability Push-Up Test: Refers to a test used to assess an individual's core stability, strength, and control. The trunk stability push-up test helps in evaluating the ability to maintain proper alignment and control of the trunk during upper body movements.

37. Deep Squat Test: Refers to a test used to assess an individual's lower body mobility, stability, and control. The deep squat test helps in identifying any restrictions, imbalances, or compensations in the hips, knees, and ankles during a full squat.

38. Hurdle Step Test: Refers to a test used to assess an individual's hip mobility, stability, and control. The hurdle step test helps in identifying any restrictions, asymmetries, or compensatory movements in the hips and pelvis during a stepping motion.

39. Active Straight Leg Raise Test: Refers to a test used to assess an individual's hamstring flexibility, hip mobility, and core stability. The active straight leg raise test helps in identifying any restrictions, tightness, or compensatory movements during a straight leg raise.

40. Rotary Stability Test: Refers to a test used to assess an individual's core stability, strength, and control during rotary movements. The rotary stability test helps in evaluating the ability to maintain proper alignment and control of the trunk during rotational movements.

41. Scoring Criteria: Refers to the specific guidelines and criteria used to evaluate each movement pattern in the Functional Movement Screen. Scoring criteria help in standardizing the assessment process and identifying areas of improvement.

42. Functional Movement Patterns: Refers to fundamental movements that are essential for daily activities, sports, and physical tasks. Functional movement patterns include squatting, lunging, bending, twisting, pushing, pulling, and walking.

43. Corrective Exercises: Refers to specific exercises designed to address movement dysfunctions, imbalances, or weaknesses identified during screening. Corrective exercises help in improving movement quality, reducing injury risk, and enhancing overall performance.

44. Movement Dysfunction: Refers to faulty movement patterns or compensatory movements that can lead to pain, injury, or reduced performance. Identifying and addressing movement dysfunctions is essential for improving movement quality and reducing injury risk.

45. Progressive Overload: Refers to the gradual increase in training intensity, volume, or complexity to stimulate continued adaptation and improvement. Progressive overload is essential for enhancing strength, endurance, and performance over time.

46. Functional Movement Training: Refers to a training approach that focuses on improving movement patterns, strength, flexibility, and coordination to enhance performance in real-life activities. Functional movement training incorporates functional exercises that mimic everyday movements and sports-specific activities.

47. Movement Quality: Refers to the efficiency, control, and alignment of movement patterns during various activities. Improving movement quality helps in reducing the risk of injury, enhancing performance, and optimizing movement efficiency.

48. Motor Control: Refers to the brain's ability to coordinate and control muscle contractions during movement. Motor control plays a crucial role in maintaining proper movement patterns, stability, and coordination.

49. Neuromuscular Control: Refers to the interaction between the nervous system and muscular system to produce coordinated movements. Improving neuromuscular control is essential for enhancing movement quality, reducing injury risk, and optimizing performance.

50. Dynamic Stability: Refers to the ability to maintain stability and control during dynamic movements, such as running, jumping, and cutting. Dynamic stability is essential for sports performance and injury prevention.

51. Functional Movement Screen (FMS): Refers to a standardized screening tool used to assess an individual's movement patterns and identify any dysfunctions or imbalances. FMS consists of seven fundamental movement patterns that are scored based on specific criteria.

52. Corrective Exercise Strategies: Refers to specific approaches and techniques used to address movement dysfunctions, imbalances, or weaknesses. Corrective exercise strategies include mobility drills, stability exercises, strength training, and movement re-education.

53. Motor Learning Principles: Refers to the theoretical concepts and strategies used to improve motor skills, movement patterns, and coordination. Motor learning principles include feedback, practice, variability, specificity, and transfer of training.

54. Strength and Conditioning: Refers to a training approach that combines strength training, cardiovascular conditioning, and flexibility exercises to enhance overall fitness and performance. Strength and conditioning programs are designed to improve strength, power, endurance, and agility.

55. Movement Efficiency: Refers to the ability to perform movements with minimal energy expenditure and

optimal biomechanics. Improving movement efficiency helps in enhancing performance, reducing fatigue, and preventing injuries.

56. Functional Training: Refers to a training approach that focuses on improving movement patterns, strength, flexibility, and coordination to enhance performance in real-life activities. Functional training incorporates exercises that mimic everyday movements and sports-specific activities.

57. Integrated Training: Refers to a training approach that combines multiple components of fitness, such as strength, flexibility, balance, and cardiovascular conditioning. Integrated training programs are designed to improve overall performance and functional capacity.

58. Client-Centered Approach: Refers to a training philosophy that focuses on the individual needs, goals, and preferences of the client. A client-centered approach involves tailoring training programs to meet the specific requirements and preferences of each client.

59. Functional Movement Specialist: Refers to a healthcare professional or fitness expert who is trained in assessing movement patterns, identifying dysfunctions, and developing corrective exercise programs. Functional movement specialists help clients improve movement quality, reduce injury risk, and enhance performance.

60. Exercise Prescription: Refers to the process of designing and implementing a customized exercise program based on the individual's specific needs, goals, and capabilities. Exercise prescription includes selecting appropriate exercises, sets, repetitions, and intensity levels to achieve desired outcomes.

61. Performance Enhancement: Refers to the process of improving an individual's movement patterns, strength, flexibility, and coordination to enhance overall performance in sports and other physical activities. Performance enhancement strategies include targeted exercises, drills, and interventions.

62. Biomechanical Analysis: Refers to the evaluation of movement patterns, joint mechanics, and muscle actions using biomechanical principles. Biomechanical analysis helps in identifying faulty mechanics, compensatory movements, and areas of improvement in movement patterns.

63. Strength Training Principles: Refers to the fundamental concepts and guidelines used to design and implement effective strength training programs. Strength training principles include specificity, overload, progression, variation, and recovery.

64. Flexibility Training Techniques: Refers to specific methods and strategies used to improve joint flexibility, range of motion, and muscle elasticity. Flexibility training techniques include static stretching, dynamic stretching, foam rolling, and mobility exercises.

65. Balance Training Progressions: Refers to the systematic progression of balance exercises to improve stability, coordination, and proprioception. Balance training progressions include static balance drills, dynamic balance exercises, and perturbation training.

66. Core Stability Exercises: Refers to exercises that target the muscles of the core, including the abdominals, obliques, and lower back. Core stability exercises help in improving trunk control, posture, and overall

movement quality.

67. Functional Movement Screening Protocols: Refers to the standardized procedures and guidelines used to administer and score the Functional Movement Screen. Screening protocols ensure consistency, reliability, and accuracy in assessing movement patterns and identifying dysfunctions.

68. Rehabilitation Exercises: Refers to specific exercises designed to facilitate recovery, restore function, and improve strength after an injury or surgery. Rehabilitation exercises focus on restoring mobility, stability, and neuromuscular control in the affected area.

69. Client Progress Tracking: Refers to the process of monitoring and evaluating a client's progress, improvements, and challenges throughout the training program. Client progress tracking helps in adjusting the training program, setting new goals, and ensuring continued success.

70. Functional Movement Screen Certification: Refers to the formal training and certification program offered to healthcare professionals and fitness experts to become proficient in administering and interpreting the Functional Movement Screen. FMS certification demonstrates expertise in assessing movement patterns, identifying dysfunctions, and developing corrective exercise programs.

71. Exercise Modification: Refers to the adjustment of exercises, sets, repetitions, or intensity levels based on the individual's capabilities, limitations, or preferences. Exercise modification helps in ensuring safety, effectiveness, and compliance with the training program.

72. Functional Movement Screening Challenges: Refers to common difficulties, limitations, or obstacles encountered during the administration and interpretation of the Functional Movement Screen. Overcoming challenges in FMS requires knowledge, experience, and adaptability in assessing movement patterns and developing corrective strategies.

73. Performance Plateaus: Refers to the stagnation or lack of progress in performance improvements despite consistent training efforts. Overcoming performance plateaus requires identifying and addressing weaknesses, modifying training programs, and setting new goals.

74. Functional Movement Screening Benefits: Refers to the advantages, outcomes, and positive effects of implementing the Functional Movement Screen in training programs. Benefits of FMS include injury prevention, improved movement quality, enhanced performance, and client satisfaction.

75. Client Compliance: Refers to the client's adherence, motivation, and engagement in following the training program, exercises, and recommendations. Client compliance is essential for achieving desired outcomes, progress, and success in improving movement patterns and performance.

76. Functional Movement Screen Research: Refers to scientific studies, articles, and publications investigating the effectiveness, reliability, and validity of the Functional Movement Screen. Research on FMS helps in enhancing the understanding, application, and outcomes of movement screening in various populations.

77. Functional Movement Screen Applications: Refers