



Model Curriculum

MCr Name: Fundamentals of strength and conditioning

MCr Code: SPF/MCr-0004

MCr Version: 1.0

NSQF Level: 2

Model Curriculum Version: 1.0

Sports, Physical Education, Fitness and Leisure Sector Skill Council
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Training Parameters

Sector	Sports
Sub-Sector	Sports Coaching and Fitness
Occupation	Sports Coaching
Country	India
NSQF Level	2
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3423.9900
Minimum Educational Qualification and Experience	Ability to read & write
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 years
Last Reviewed On	30/04/2024
Next Review Date	30/04/2027
NSQC Approval Date	30/04/2024
NOS Version	1.0
Model Curriculum Creation Date	30/04/2024
Model Curriculum Valid Up to Date	30/04/2027
Model Curriculum Version	1.0
Minimum Duration of the Course	15 Hours
Maximum Duration of the Course	15 Hours

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Define the scope and responsibilities of a strength and conditioning professional
- Conduct thorough client assessments, considering physical fitness, health history, and individual goals
- Demonstrate proficiency in foundational strength and conditioning exercises with proper form and technique
- Understand the principles of periodization and its application in program design
- Follow safety protocols for injury prevention and medical emergency

Compulsory Modules

The table lists the modules, their duration and mode of delivery.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
Module 1: Introduction to strength and conditioning training and the job-role	0.5:00	02:00	-	-	2.5:00
Module 2: Fundamentals of assessment and program in strength and conditioning	01:00	02:00	-	-	03:00
Module 3: Fundamentals of exercise techniques and form in strength and conditioning	1.5:00	02:00	-	-	3.5:00
Module 4: Basic concepts of periodization and progress monitoring in strength and conditioning	01:00	02:00	-	-	03:00
Module 5: Safety and injury prevention in strength and conditioning	01:00	02:00	-	-	03:00
Total Duration	05:00	10:00	-	-	15:00

Module Details

Module 1: Introduction to strength and conditioning training and the job-role

Terminal Outcomes:

- Understand the foundational principles of strength and conditioning training
- Describe the role and responsibilities of a strength and conditioning coach
- Discuss the career opportunities for a strength and conditioning coach job-role

Duration: 0.5:00	Duration: 02:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Define and explain the fundamental principles underlying strength and conditioning training • Discuss the physiological and biomechanical aspects of strength development • define the key job roles and responsibilities of strength and conditioning coach 	<ul style="list-style-type: none"> • Create a career progression chart of a strength and conditioning coach • Conduct role-playing exercises simulating client interactions • Participate in discussions on effective communication and de-escalation techniques • Assess the application of acquired knowledge and skills within the module
Classroom Aids:	
Laptop, whiteboard, marker, projector, chart paper, clipboards	
Tools, Equipment and Other Requirements	
Access to Fitness Equipment for hands on experience	

Module 2: : Fundamentals of assessment and program in strength and conditioning

Terminal Outcomes:

- Understand assessments for strength and conditioning clients
- Understand the basic concepts of program design for strength and conditioning clients

Duration: 1:00	Duration: 2:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain various assessment protocols & methods for evaluating strength, mobility, flexibility, and cardiovascular fitness. • Discuss the importance of integration of assessment outcomes into program design • Discuss the basic principles of program design for strength and conditioning 	<ul style="list-style-type: none"> • Engage in practical sessions to use basic assessment techniques • Demonstrate proper data collection and recording • Engage in basic training design programs based on assessment outcomes • Assess the application of acquired knowledge and skills within the module
Classroom Aids:	
Laptop, whiteboard, marker, projector, chart paper, clipboards, posters of human muscular and skeletal system	
Tools, Equipment and Other Requirements	
Assessment tools such as dynamometers, goniometers, and body composition analyzers, resistance bands	

Module 3: Fundamentals of exercise techniques and form in strength and conditioning

Terminal Outcomes:

- Demonstrate essential strength and conditioning exercises
- Understand the technicalities of exercise form

Duration: 1.5:00	Duration: 2:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the biomechanics and muscle engagement associated with foundational strength and conditioning exercises, including compound movements and isolation exercises • Discuss the importance of maintaining proper form and common form errors and corrections for various exercises 	<ul style="list-style-type: none"> • Demonstrate and practice essential strength and conditioning exercises • Engage in practical sessions focused on identifying and correcting form errors • Practice cueing techniques to enhance client understanding and execution • Create sample workout routines with an emphasis on form-specific exercises • Assess the application of acquired knowledge and skills within the module
Classroom Aids:	
Laptop, whiteboard, marker, projector, chart paper, clipboards	
Tools, Equipment and Other Requirements	
Resistance training equipment, Mirrors for form assessment	

Module 4: Basic concepts of periodization and progress monitoring in strength and conditioning

Terminal Outcomes:

- Understand the principles of periodization in strength and conditioning programming
- Apply effective methods for monitoring client progress

<i>Duration: 1:00</i>	<i>Duration: 2:00</i>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the concept of periodization and its application in designing training programs • Discuss various methods for monitoring client progress, including performance metrics, biofeedback, and subjective feedback 	<ul style="list-style-type: none"> • Develop periodized training plans for different fitness goals • Practice assessing client progress using performance metrics and other monitoring tool • Assess the application of acquired knowledge and skills within the module
Classroom Aids:	
Laptop, whiteboard, marker, projector, chart paper, clipboards, posters of human muscular and skeletal system	
Tools, Equipment and Other Requirements	
Fitness tracking tools (e.g., wearable devices, apps) for progress monitoring	

Module 5: Safety and injury prevention in strength and conditioning

Terminal Outcomes:

- Understand safety considerations in strength and conditioning
- Implement effective injury prevention strategies for clients

<i>Duration: 1:00</i>	<i>Duration: 2:00</i>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Identify common injuries associated with strength and conditioning exercises • Discuss factors contributing to injuries and preventive measures • Discuss client screening and risk assessment before initiating training • Discuss how pre-existing conditions and medical history impact safety 	<ul style="list-style-type: none"> • Engage in simulated emergency scenarios and practice appropriate response strategies • Demonstrate proper warm-up and cooldown exercises • Role-Play scenarios to administer first-aid • Assess the application of acquired knowledge and skills within the module
Classroom Aids:	
Laptop, whiteboard, marker, projector, chart paper, clipboards	
Tools, Equipment and Other Requirements	
First aid kit and emergency response props	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Class 10 th pass	Fitness & conditioning	Minimum of 1 year	Must have worked in a fitness industry	Minimum of 1 year	Strength & Conditioning Expert in a academy, club etc.	All empaneled Trainers would have to undergo “Train the Trainer” Program conducted by SPEFL SC for each job role time to time.

Trainer Certification	
Domain Certification	Platform Certification
Certified ToT for any job-role in a relevant domain as per NCrf or the micro credential mapped to “Fundamentals of strength and conditioning”, SPF/MCr-0004, v1.0 Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: “Trainer (VET and skills)”, mapped to the Qualification Pack: “MEP/Q2601, v2.0”. The minimum accepted score is 80%

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
Class 12 th pass	Fitness & conditioning	Minimum of 2 years	Must have worked in a fitness industry	Minimum of 2 years	Strength & Conditioning Expert in a academy, club etc.	All empaneled Assessors would have to undergo “Train the Assessor” Program conducted by SPEFL SC for each job role time to time.

Assessor Certification	
Domain Certification	Platform Certification
Certified ToA for any job-role in a relevant domain as per NCrF or the micro credential mapped to “Fundamentals of strength and conditioning”, SPF/MCr-0004, v1.0 Minimum accepted score is 80%	Recommended that the Assessor is certified for the Job Role: “Assessor (VET and skills)”, mapped to the Qualification Pack: “MEP/Q2701, v2.0”. The minimum accepted score is 80%



Assessment Strategy

Assessment Guidelines

Criteria for assessment for each Micro Credential will be created by the SPEFL - Sector Skill Council. This section includes the processes involved in identifying, gathering and interpreting information to evaluate the learner on the required competencies of the program

Glossary

Term	Description
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module . A set of terminal outcomes help to achieve the training outcome.

Acronyms and Abbreviations

Term	Description
MCr	Micro Credential
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards