

Title	Assess individual levels of physical performance		
Level	4	Credits	4

Purpose	<p>People credited with this unit standard are able to: demonstrate understanding of dimensions of field assessment of fitness and performance; assess specific aspects of subject performance using field assessments of fitness and/or performance components; and measure changes in subjects' fitness in terms of selected fitness components by reassessment. This unit standard is designed for people carrying out fitness assessments for individuals and/or groups in and associated with fitness, sport, and recreation facilities and programmes.</p>
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Classification	Fitness > Fitness Assessment and Individual Fitness Instruction
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Available grade	Achieved
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Prerequisites	Unit 7036, <i>Assess individual fitness for activity</i> , or demonstrate equivalent knowledge and skills.
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Guidance Information

- 1 Fitness components include - aerobic power, aerobic capacity, anaerobic power, anaerobic capacity, strength, muscular endurance, flexibility, speed, agility, balance, coordination, body composition.
- 2 Field tests are defined as assessments that can be carried out in the absence of a laboratory facility, equipment, or specialist support. However they may also be maximal and may involve testing and measuring equipment.
- 3 Reference to a *test battery* is intended to mean a group of tests involving at least four fitness components.
- 4 Reference to the carrying out of several types of assessments to fulfil a performance criterion may be applied to multiple assessments on a single subject or single assessments on a number of subjects or any intermediate combination of assessments and subjects.
- 5 This unit standard requires competence in the application of the hierarchy of controls outlined in the Health and Safety in Employment Act 1992 (HSE): elimination of significant hazards; isolation of significant hazards when elimination is not possible; and minimisation of significant hazards where elimination and isolation are not possible.

- 6 This unit standard requires competence in the application of relevant provisions of the Privacy Act. 1993 (PA) in relation to client assessment records. Facility practice regarding the documentation and storage of client information should comply with the PA.
- 7 This unit standard requires competence in the application of the American College of Sports Medicine (ACSM) Risk Categories for evaluating whether or not a medical evaluation and graded stress test is desirable prior to commencing an activity programme. (See reference below in special note 9.)
- 8 The above competencies in the HSE, PA and ACSM Risk Categories are part of the Fitness Sector recommended prerequisite.
- 9 Recommended training resources include the latest editions of the following:
- Handcock, Phil J (1994). *Techniques of Fitness Assessment: The living manual*. Auckland. Fitness Concepts.
 - Handcock, Phil.J. & Knight Brenda (1994). *Field Testing Manual for Sports*. Wellington. NZ Sports Science and Technology Board & Coaching NZ.
 - Skinner, James S. (ed) (1993) *Exercise Testing and Exercise Prescription for Special Cases: theoretical basis and clinical application*. Philadelphia, PA: Lea & Febiger.
 - American College of Sports Medicine. *Resource Manual for Guidelines for Exercise Testing and Prescription*. Philadelphia, PA: Lippincott Williams & Wilkins. Latest edition.

Outcomes and performance criteria

Outcome 1

Demonstrate understanding of dimensions of field assessment of fitness and performance.

Performance criteria

- 1.1 Explanation distinguishes between laboratory and field assessment and establishes utility of field assessment for specified purposes.
- Range distinction - equipment requirements, staff training requirements and qualifications, cost, accessibility, applicability (to subject's activity), limitations;
specified purposes - exercise prescription, performance monitoring, motivation, screening for participation, selection (sport), recovery from injury.
- 1.2 Generalised assessment requirements are identified and described in relation to fitness components to be assessed.
- Range reliability, validity, specificity, precision, practicality, objectivity, sensitivity, baseline assessment requirements, normative assessment requirements.

- 1.3 Limitations of assessment protocols and results are identified and described in relation to specific assessments and their uses.

Range	<p>limitations – reliability, validity, specificity, precision, practicality, objectivity, sensitivity, baseline assessment, normative assessment; assessment protocols can include –</p> <p>aerobic power – Hawley Noakes Test of Maximal Aerobic Power, 20 meter Multistage Shuttle Test, timed run, swim and wheelchair protocols, timed ergometer protocols (cycle, rowing and/or paddling, treadmill, stepper and/or stairclimber);</p> <p>aerobic capacity – timed run, swim and wheelchair protocols, timed ergometer protocols (cycle, rowing and/or paddling, treadmill, stepper and/or stairclimber);</p> <p>anaerobic power – vertical jump test, Bench Press Power Test, Chin-Ups Test, Wingate Cycle Ergometer Test;</p> <p>anaerobic capacity – Repeated High Intensity Endurance Test (RHJET), Margaria-Kalamen Stair Climbing Test, High Box Test, 5 Double Leg Jump Test, 100m Shuttle Run;</p> <p>strength – dynamometer (grip, leg & back), 1RM (standard resistance exercises);</p> <p>muscular endurance – Cadence Testing of muscle groups using free weights or body weight exercises (bench press, push ups, abdominal curls);</p> <p>flexibility – Sit and Reach Test, Sahrman Tests for hamstring length, hip flexor length and quadriceps (rectus femoris) length, Apley Scratch Test;</p> <p>body composition - somatotyping.</p>
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Outcome 2

Assess specific aspects of subject performance using field assessments of fitness and/or performance components.

Performance criteria

- 2.1 Selection of assessment battery matches subject characteristics and performance assessment needs and is within resources of the assessing organisation.

Range	subject characteristics – age, height, weight, activity history, health history, injury history, performance goals, ACSM risk category.
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- 2.2 Planning of assessment session is carried out to confirm availability of subject(s) and all resources and to meet organisational requirements for use of resources and communication.

Range	subject communication (time and place of assessment, pre-assessment preparation) facility, equipment, documentation, contingencies.
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- 2.3 Examination of subject's limitations and contraindications for assessment, and indications for medical clearance meet established safety guidelines.
- Range HSE, ACSM guidelines.
- 2.4 Assessments of selected fitness and/or performance components are carried out according to standardised protocols for assessing and recording conditions and results.
- 2.5 Modifications to standard assessment protocols satisfy generalised assessment requirements and match performance requirements of subject's activity and/or event and subject's characteristics.
- Range generalised assessment requirements – reliability, validity, specificity, precision, practicality, objectivity, sensitivity, baseline assessment requirements, normative assessment requirements.
- 2.6 Processing and interpretation of results and assessment conditions meets subject and organisational requirements for documentation, feedback, and evaluation.
- Range subject requirements – feedback on performance, comparison with earlier assessments (if available), performance improvement requirements;
organisation requirements – equipment use and performance notes, documentation of assessment conditions and results to facilitate standardisation in reassessing.

Outcome 3

Measure changes in subjects' fitness in terms of selected fitness components by reassessment.

Performance criteria

- 3.1 Evaluation establishes reassessment conditions based on previous assessment and subsequent activity.
- 3.2 Reassessment conditions meet organisation and assessment protocol requirements for standardisation.
- Range assessor, equipment, assessment environment, time of day, subject preparation pre-assessment.
- 3.3 Interpretation of reassessment results relates subject activity and health behaviour to changes in performance using principles of training.
- Range training thresholds, frequency, duration, intensity, progressive overload, maintenance, rest and recovery, specificity, reversibility, periodisation.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 June 1996	31 December 2020
Revision	2	8 February 2000	31 December 2020
Review	3	17 December 2001	31 December 2020
Review	4	28 November 2019	31 December 2020

Consent and Moderation Requirements (CMR) reference

0099

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.