

## Exercise Specialist Level Requirements

### 1. Qualification requirement

An individual at the level of expertise for Exercise Specialist will hold a New Zealand issued undergraduate degree or equivalent with at least the specific exercise science content as per the schedule below\*. Note that the degree does not necessarily need to be specifically in exercise science; it is acknowledged that many general sport and exercise degrees contain substantial exercise science content even if not obviously apparent in the title of the degree.

### 2. Experience requirement

An Exercise Specialist is expected to work in the health and fitness industry as a specialist personal trainer with considerable experience (minimum 500 hours# over a minimum of 2 years as a personal trainer) and knowledge. In addition to the expectations and competencies of Exercise Assistant, Exercise Consultant (I and II) and Personal Trainer levels they are endorsed to perform the activities as detailed in the descriptor column on the table following:

- Prescribe personalised physical or health rehabilitation services
- Undertake fundamental movement competency screening
- Perform advanced fitness testing
- Provide comprehensive personalised exercise prescription
- Provide sports specific exercise prescription
- Give general nutrition or dietary advice to clients on fat loss, muscle gain and general health

#A self-logged account or statement verified by employer and or clients. A minimum of 100 hours (total) of experience with a combination of at least four of the population groups nominated in section 4b below is compulsory.

Every person applying for registration at this level will be contacted by an 'assessor' who would verify that the individual has the competencies and experience expected. This would also involve direct contact with the end users (clients) of the person applying for registration.

Exercise Specialists are **not** endorsed to:

- Prescribe rehabilitation programmes for high risk populations unless under the guidance of a rehabilitation specialist such as a clinical exercise physiologist or medical practitioner.
- Provide exercise assessments on high risk populations, such as cardiovascular stress testing
- Provide individualised nutritional advice for special populations unless under the guidance of a registered dietician
- Diagnose disease
- Diagnose musculoskeletal conditions

### 3. Degree content requirements

\*Specific exercise science content must comprise of at least 225 points total within a degree and include each of the following at the specified academic credits and level (or equivalent):

- Detailed musculoskeletal anatomy (minimum 15 credits level 5)
- Human physiology (minimum 15 credits level 5)
- Fundamental biomechanics (minimum 15 credits level 5)
- Applied biomechanics (minimum 15 credits level 6)
- Exercise physiology (minimum 15 credits level 5)
- Fundamental exercise prescription for resistance training, cardiovascular conditioning, flexibility (minimum 15 credits level 5)
- Applied exercise prescription (minimum 15 credits level 6)
- Fitness assessment (minimum 15 credits level 5)
- Nutrition (minimum 15 credits level 5)
- Symptomatic populations patho-physiology, recommendations and contraindications (minimum 15 credits level 6)
- Sports conditioning (minimum 15 credits level 6)

- Exercise psychology (minimum 15 credits level 6)
- Physical activity and health promotion (minimum 15 credits level 6)
- Exercise science research methods and analysis (minimum 30 credits level 7)

It is recognised that the above content may exist discreetly across a variety of papers / modules / courses within a degree rather than as specifically nominated topics. In such cases, evidence should be provided to detail approximate total point value of each topic area. Additionally, some point may be embedded in other content, for example research methods may underpin all higher-level papers and thus be delivered in specific context. Where such content is demonstrable the total points needed may be less than 225.

## 4. An Exercise Specialist will have the following knowledge and competencies:

### a. Evidence based, inter-professional practice

- Underpins their practice by accessing, consuming and critically evaluating a broad range of health and fitness research literature
- Understands the scope of practice for a range of allied health professionals and how inter-professional networks mutually compliment professional practice
- Applies knowledge and understanding to recognise, assess and refer on appropriate clients to a other health professionals as required
- Understands and can articulate their own scope of practice

### b. Exercise for symptomatic and special populations

The criteria below refer specifically to the following:

- Diabetes, types I and II
  - Cardiovascular disease
  - Hypertension
  - Osteoarthritis
  - Rheumatoid arthritis
  - Respiratory conditions
  - Obesity
  - Osteoporosis
  - Pre adolescents and adolescents
  - Ante/post natal clients
  - Older adults
- Can identify risk factors for conditions that require consultation with a medical practitioner and rehabilitation specialist before exercise prescription
  - Applies and interprets screening tools to determine the suitability of exercise and physical activity interventions for symptomatic and special populations (risk stratification)
  - Understands how the structure and function of basic body systems are affected by disorders and disease (patho-physiology)
  - Has detailed knowledge of disease-specific signs and symptoms increasing the risk of complications during exercise
  - Selects appropriate fitness tests or modifies standard protocols to accommodate monitoring of symptomatic and special populations
  - Understands the effects of commonly prescribed medications on exercise response and adaptation
  - Prescribes safe and appropriate physical activity and exercise (endurance and resistance) programmes for symptomatic and special populations based on condition specific recommendations and contraindications
  - Understands the role for exercise and physical activity participation in the prevention of diseases

### c. Anatomy, physiology, biomechanics

- Has detailed knowledge of human anatomy, physiology and biomechanics and how such knowledge underpins effective programming practice for:
  - Resistance training

- Cardiovascular training
  - Flexibility
- Understands the physiological responses and adaptations of the neuromuscular, cardiovascular, respiratory and endocrine systems to exercise and training and how such knowledge underpins effective programming practice for:
  - Resistance training
  - Cardiovascular training
  - Flexibility

#### **d. Motivation, adherence and exercise behaviour**

- Understands the theories and principles of motivation and adherence to exercise at the individual level
- Applies and evaluates psychological principles to understand client behaviour in a physical activity/exercise setting

#### **e. Nutrition and body composition**

- Understands basic principles and concepts of nutrition and how they relate to exercise and general health
- Applies basic dietary assessment methodologies, and can explain the nutritional requirements for muscle hypertrophy and fat loss
- Understands the role of nutrition in health and wellbeing, and in the reduction of the incidence of lifestyle diseases

#### **f. Physical Activity and Health Promotion**

- Can describe national health trends and key strategies implemented to remedy identified issues

#### **g. Exercise prescription and assessment**

- Can perform fundamental movement competency (dynamic posture) analysis and customize exercise prescription accordingly
- Has advanced applied knowledge of exercise prescription including exercise modality options and programme design
- Has advanced applied knowledge of resistance training techniques and the ability to safely and effectively coach them
- Can design and implement a sports specific periodised programme
- Understands the biomechanical demands, muscle actions, motor skills and role of energy systems in different sports and their relevance to designing effective sports conditioning programmes

Can safely and effectively conduct a range of fitness assessments of all components of fitness, appropriate to the client, and use the results to inform programming practice.