

**Unit Title: Principles of exercise, fitness and health**

Level: 2  
 Credit value: 4  
 Guided learning hours: 28  
 Unit expiry date: 31/12/2013

**Unit purpose and aim**

This unit covers knowledge an instructor needs to programme safe and effective exercise for a range of clients, the health benefits of physical activity and the importance of healthy eating.

| Learning Outcomes                                | Assessment Criteria  | Knowledge, understanding and skills |
|--|--|-------------------------------------|
| 1 Understand the effects of exercise on the body | 1.1 Describe cardiovascular and respiratory adaptations to endurance/aerobic training<br>1.2 Identify the short and long term effects of exercise on blood pressure<br>1.3 Describe the “blood pooling” effect following exercise<br>1.4 Describe the effects of exercise on bones and joints including the significance of weight bearing exercise<br>1.5 Describe delayed onset of muscle soreness (DOMS)<br>1.6 Identify exercises or techniques likely to cause delayed onset of muscle soreness<br>1.7 Describe the short and long term effects of different types of exercise on muscle<br>1.8 Describe different exercises that can improve posture |                                     |

|   |  |  |
|---|--|--|
| <p>2 Understand the components of fitness</p>   | <p>2.1 Define the components of health related fitness</p> <p>2.2 Define the components of skill related fitness</p> <p>2.3 Identify the factors that affect health and skill related fitness</p>  |  |
| <p>3 Understand how to apply the principles and variables of fitness to an exercise programme</p> | <p>3.1 Describe the physiological implications of:</p> <ul style="list-style-type: none"> <li>• specificity</li> <li>• progressive overload</li> <li>• reversibility</li> <li>• adaptability</li> <li>• individuality</li> <li>• recovery time</li> </ul> <p>3.2 Explain the principles of FITT (Frequency, Intensity, Time and Type)</p> <p>3.3 Explain the principles of a progressive training programme in developing components of fitness</p> <p>3.4 Explain how to recognise when and how to regress a training programme</p> <p>3.5 Explain the principles of adaptation, modification and progression for each component of FITT (Frequency, Intensity, Time and Type)</p> <p>3.6 Describe the effect of speed on posture, alignment and intensity</p> <p>3.7 Describe the effect of levers, gravity and resistance on exercise</p> <p>3.8 Describe the differences between programming exercise for physical fitness and for health benefits</p> |  |

|  |  |  |
|--|--|--|
| <p>4 Understand the Exercise contraindications and key safety guidelines for special populations</p> | <p>4.1 Describe the exercise contraindications and key safety guidelines for working with older people (50 plus)</p> <p>4.2 Describe the exercise contraindications and key safety guidelines for working with antenatal and postnatal clients</p> <p>4.3 Describe the exercise contraindications and key safety guidelines for working with young people (14-16)</p> <p>4.4 Describe the key safety considerations for working with disabled people</p> |  |
| <p>5 Understand how to safely monitor exercise intensity</p>   | <p>5.1 Describe the benefits and limitations of different methods of monitoring exercise intensity including:</p> <ul style="list-style-type: none"> <li>• the talk test</li> <li>• Rate of Perceived Exertion (RPE)</li> <li>• heart rate monitoring and the use of different heart rate zones</li> </ul>   |  |
| <p>6 Understand the health benefits of physical activity</p>   | <p>6.1 Describe the health benefits of physical activity</p> <p>6.2 Describe the effect of physical activity on the causes of certain diseases including:</p> <ul style="list-style-type: none"> <li>• Coronary Heart Disease</li> <li>• Some cancers</li> <li>• Type 2 Diabetes</li> <li>• Hypertension</li> <li>• Obesity</li> <li>• Osteoporosis</li> </ul>   |  |

|  |   |  |
|--|---|--|
| <p>7 Understand the importance of healthy eating</p> | <p>7.1 Describe the national food model/guide</p> <p>7.2 Describe key healthy eating advice that underpins a healthy diet</p> <p>7.3 Explain the importance of adequate hydration</p> <p>7.4 Explain professional role boundaries in relation to offering nutritional advice</p> <p>7.5 Explain the dietary role of the key nutrients</p> <p>7.6 Identify the common dietary sources of the key nutrients</p> <p>7.7 Describe the energy balance equation</p> <p>7.8 Explain the health risks of poor nutrition</p> |  |
|--|---|--|

### Assessment

---

Evidence for this unit is generated through the candidate completing an OCR set test under examination conditions which is then marked by the centre assessor. The time available for completion of the test is 1 hour 30 minutes. The test comprises 7 individual sections, with each section fully addressing the relevant unit Learning Outcome. Each section of the test has a pass mark set to test full mastery of the learning outcome. The pass marks for each section are indicated on the front of the test.

Candidates who do not meet the required standard to pass a section will only be required to re-sit the section/s where they have not previously meet the required standard.

The test must be completed in full by the candidate and internally marked and verified by the centre before being sampled by the OCR External Verifier.

OCR will provide comprehensive marking guidance to Centres which must be used by Assessors to mark the test.

The test will be available to download from OCR Interchange for all approved OCR centres at <http://www.ocr.org.uk/interchange/index.html>

### Evidence requirements

---

The OCR set test fully meets all required Assessment Criteria for this unit. A detailed mark scheme is provided for centre assessors, outlining minimum requirements for each question. The OCR set test is the only accepted form of evidence for this unit. The assignment should be stored in an appropriate candidate portfolio for access by the OCR External Verifier when requested.

### Guidance on assessment and evidence requirements

---

Candidates are required to complete the OCR – set assignment under examination conditions in accordance with *Instructions for Conducting Examinations* which can be found on the JCQ website: [http://www.jcq.org.uk/jcq\\_top\\_ten/index.cfm](http://www.jcq.org.uk/jcq_top_ten/index.cfm)

Where candidates have access – related requirements, additional information on how to manage their assessment can be found in the OCR Centre handbook for this qualification.

Details of relationship between the unit and national occupational standards

---

Instructing Exercise and Fitness 2009 NOS

Resources

---

Access to OCR Interchange

Examination conditions environment

Additional information

---

For further information regarding administration for this qualification, please refer to the OCR document '*Admin Guide: Vocational Qualifications*' (A850).

---