

Unit 1: Fitness for sport and exercise

Scheme of work

Guided learning hours (GLH): 30

Number of lessons: 20

Duration of lessons: one/two hours (as shown)

This scheme of work is provided to help you make the most of your planning time. Customise this by adding your own activities/lesson ideas to the 'Activities' column.

Lesson	Unit content*	Activities	Links to other units
1	Unit introduction	<ul style="list-style-type: none"> • Introduce the unit (approx. 10 minutes): outline the nature of the learning aims and onscreen test that learners will be expected to complete for this unit. 	
Learning aim A: Know about the components of fitness and the principles of training			
1 cont. (1 hour)	Topic A.1 Components of physical fitness: <ul style="list-style-type: none"> • aerobic endurance • muscular endurance • flexibility • speed • muscular strength • body composition. 	<ul style="list-style-type: none"> • Tutor presentation: the components of physical fitness, using PowerPoint or other presentation materials. • Class discussion: components of physical fitness. 	Topics A.1 and A.2 have links with: <ul style="list-style-type: none"> • Unit 2: Practical Sports Performance • Unit 5: Training for Personal Fitness
	Topic A.2 Components of skill-related fitness: <ul style="list-style-type: none"> • agility • balance • coordination • power 	<ul style="list-style-type: none"> • Tutor presentation: the components of skill-related fitness, using PowerPoint or other presentation materials. • Class discussion: linking fitness components to sports performance. 	

Unit 1: Fitness for sport and exercise

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	<ul style="list-style-type: none"> reaction time recognition of fitness components needed for sports performance. 	<ul style="list-style-type: none"> Individual or paired activity: learners to link fitness components to sports performance. 	
2 (1 hour)	<p>Topic A.3 Why fitness components are important for successful participation in given sports in terms of:</p> <ul style="list-style-type: none"> being able to successfully meet the physical demands of the sport in order to reach optimal performance being able to successfully meet the skill-related demands of the sport in order to reach optimal performance being able to perform efficiently giving due consideration to the type of event/position played. 	<ul style="list-style-type: none"> Show Video/DVD of elite sports performers in action. Class discussion: importance of fitness components for successful sports performance. Prompt learners to draw on their own experiences. Tutor presentation: fitness components for successful sports performance, using PowerPoint or other presentation materials, followed by class discussion. 	<p>Topic A.3 has links with:</p> <ul style="list-style-type: none"> Unit 2: Practical Sports Performance Unit 5: Training for Personal Fitness
3 (1 hour)	<p>Topic A.4 Exercise intensity and how it can be determined:</p> <ul style="list-style-type: none"> intensity – be able to measure heart rate (HR) and apply HR intensity to fitness training methods know about target zones and training thresholds. Be able to calculate training zones and apply HR max to training: $HR\ max = 220 - age\ (years)$ be able to calculate 60–85% HR max and know that this is the recommended training zone for cardiovascular health and fitness. 	<ul style="list-style-type: none"> Tutor presentation: measuring heart rate, using PowerPoint or other presentation materials. Group or paired activity: calculating maximum heart rate (HR max). 	<p>Topic A.4 has links with:</p> <ul style="list-style-type: none"> Unit 5: Training for Personal Fitness
4 (1 hour)	<p>Topic A.4 cont:</p> <ul style="list-style-type: none"> know that the Borg (1970) Rate of Perceived Exertion (RPE) Scale can be used as a measure of exercise intensity 	<ul style="list-style-type: none"> Tutor presentation: using PowerPoint or other presentation materials, followed by group discussion. 	<p>Topic A.4 has links with:</p> <ul style="list-style-type: none"> Unit 5: Training for Personal Fitness

Unit 1: Fitness for sport and exercise

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	<ul style="list-style-type: none"> know about the relationship between RPE and heart rate where: $RPE \times 10 = HR$ (bpm) application of the FITT principles to training methods, regimes and given exercise situations. 	<ul style="list-style-type: none"> Activity: learners undertake physical activity (e.g. continuous training, acceleration sprints, circuit training) and record their exercise HR at pre-determined time intervals. Activity to be followed by analysis of HR data according to HR training zones. Homework: Exploring the relationship between HR and the Rate of Perceived Exertion (RPE) Scale. 	
<p>5 (2 hours)</p>	<p>Topic A.5 The basic principles of training (FITT):</p> <ul style="list-style-type: none"> frequency: the number of training sessions completed over a period of time, usually per week intensity: how hard an individual will train time: how long an individual will train for type: how an individual will train by selecting a training method to improve a specific component of fitness and/or their sports performance. <p>Topic A.6 Additional principles of training:</p> <ul style="list-style-type: none"> progressive overload specificity individual differences/needs adaptation reversibility variation rest and recovery application of the principles of training to training methods, regimes and given exercise settings. 	<ul style="list-style-type: none"> Tutor presentation: the basic and additional principles of training, using PowerPoint or other presentation materials. Class discussion: principles of training related to learners' own sports training and performance. Activity: based on prior learning, learners to design a circuit training session, which incorporates the principles of training and demonstrates application of the principles of training to training methods, regimes and given exercise settings. Follow-up activity: learners to deliver or participate in the circuit training sessions they have designed. 	<p>Topics A.5 and A.6 have links with:</p> <ul style="list-style-type: none"> Unit 5: Training for Personal Fitness

Unit 1: Fitness for sport and exercise

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Learning aim B: Explore different fitness training methods			
<p>6 (2 hours)</p>	<p>Topic B.1 Requirements for each of the following fitness training methods:</p> <ul style="list-style-type: none"> ● safe, correct use of equipment ● safe, correct use of training technique ● requirements for undertaking the fitness training method ● application of the basic principles of training (FITT) for each fitness training method ● linking each fitness training method to the associated health-related/skill-related component of fitness. <p>Topic B.2 Additional requirements for each of the fitness training methods:</p> <ul style="list-style-type: none"> ● advantages/disadvantages ● application of exercise intensity to fitness training methods ● application of principles of training to fitness training methods ● appropriate application of fitness training method(s) for given situation(s) ● appropriate application of fitness training method(s) to given client needs/goals/aims/objectives. <p>Topic B.3 Fitness training methods for:</p> <ul style="list-style-type: none"> ● flexibility training: <ul style="list-style-type: none"> ○ static ○ ballistic ○ Proprioceptive Neuromuscular Facilitation (PNF) technique. 	<ul style="list-style-type: none"> ● Topics B.1 and B.2 are to be incorporated into delivery of each training method (Topic B.3). ● Show video/DVD of types of flexibility training. Alternatively, show a video/DVD of PNF method and application. ● Group activity**: learners to undertake and experience a range of different stretches, using different types of flexibility training. This practical session could include input from a health and fitness instructor/personal trainer. ● Guest speaker: sports physiotherapist, followed by question and answer session. 	<p>Topics B.1, B.2 and B.3 have links with:</p> <ul style="list-style-type: none"> ● Unit 5: Training for Personal Fitness

Unit 1: Fitness for sport and exercise

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7 (2 hours)	Topic B.3 cont.: <ul style="list-style-type: none"> ● strength, muscular endurance and power: <ul style="list-style-type: none"> ○ circuit training ● aerobic endurance: <ul style="list-style-type: none"> ○ circuit training. 	<ul style="list-style-type: none"> ● Tutor presentation: circuit training, using PowerPoint or other presentation materials, followed by group discussion. ● Group activity: learners to take part in each method.** ● Alternatively, select different circuits that learners have designed to implement. 	Topics B.1, B.2 and B.3 have links with: <ul style="list-style-type: none"> ● Unit 5: Training for Personal Fitness
8 (2 hours)	Topic B.3 cont.: <ul style="list-style-type: none"> ● free weights. 	<ul style="list-style-type: none"> ● Tutor presentation: training with free weights, using PowerPoint or other presentation materials. ● Group activity: learners to take part in each method.** ● Visit to a local sports centre or gym for learners to have an induction to weight training and to use free weights. 	Topics B.1, B.2 and B.3 have links with: <ul style="list-style-type: none"> ● Unit 5: Training for Personal Fitness
9 (1 hour)	Topic B.3 cont.: <ul style="list-style-type: none"> ● plyometrics. 	<ul style="list-style-type: none"> ● Show video/DVD of plyometrics training and exercises. ● Tutor presentation: plyometrics training, using PowerPoint or other presentation materials. ● Group activity: learners to take part in the method.** 	Topics B.1, B.2 and B.3 have links with: <ul style="list-style-type: none"> ● Unit 5: Training for Personal Fitness
10 (2 hours)	Topic B.3 cont.: <ul style="list-style-type: none"> ● aerobic endurance: <ul style="list-style-type: none"> ○ continuous training ○ fartlek training ○ interval training ○ circuit training. 	<ul style="list-style-type: none"> ● Individual activity: learners to design their own personal exercise programme, incorporating fitness training method(s) they find enjoyable and that meet personal training goals and needs. Training programme can be implemented and training diary maintained. ● Tutor presentation: using PowerPoint or other presentation materials. ● Group activity: learners to take part in each method.** 	Topics B.1, B.2 and B.3 have links with: <ul style="list-style-type: none"> ● Unit 5: Training for Personal Fitness

Unit 1: Fitness for sport and exercise

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11 (1 hour)	Topic B.3 cont.: <ul style="list-style-type: none"> ● speed: <ul style="list-style-type: none"> ○ hollow sprints ○ acceleration sprints ○ interval training. 	<ul style="list-style-type: none"> ● Small group work and discussion: review progress with personal exercise programme. ● Tutor presentation: speed training, using PowerPoint or other presentation materials, followed by group discussion. ● Video/DVD showing different types of drills used to develop speed, including sport-specific drills. ● Group activity: after initial input from teachers/tutors, e.g. using PowerPoint or other presentation materials, learners to take part in each method.** 	Topics B.1, B.2 and B.3 have links with: <ul style="list-style-type: none"> ● Unit 5: Training for Personal Fitness
Learning aim C: Investigate fitness testing to determine fitness levels			
12 (2 hours)	Topic C.2 Importance of fitness testing to sports performers and coaches Topic C.3 Requirements for administration of each fitness test	<ul style="list-style-type: none"> ● Small group work and discussion: review progress with personal exercise programme. ● Guest speaker: sports coach/county level sports performer to discuss the importance of fitness testing in their training regime, followed by question and answer session. ● Topic C.3 is incorporated into the delivery of each different fitness test (below). ● Activity: design an informed consent form. 	Topic C.2 has partial links with: <ul style="list-style-type: none"> ● Unit 5: Training for Personal Fitness No unit links for Topic C.3 .
13 (2 hours)	Topic C.1 Fitness test methods for components of fitness Topic C.3 Requirements for administration of each fitness test Topic C.4 Interpretation of fitness test results: In the context of: <ul style="list-style-type: none"> ● flexibility: sit and reach test ● strength: grip dynamometer. 	<ul style="list-style-type: none"> ● Topics C.1, C.3 and C.4 are covered within delivery of each fitness test. ● Tutor presentation: the sit and reach test, using PowerPoint or other presentation materials, followed by group discussion. ● Group activity: learners to complete the sit and reach test during lesson time and interpret their results. 	Topic C.1, C.3 and C.4 have partial links with: <ul style="list-style-type: none"> ● Unit 5: Training for Personal Fitness

Unit 1: Fitness for sport and exercise

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		<ul style="list-style-type: none"> • Tutor presentation: the grip dynamometer, using PowerPoint or other presentation materials, followed by group discussion. • Group activity: learners to complete the grip dynamometer test during lesson time and interpret their results. 	
14 (1 hour)	Topics C.1, C.3 and C.4 cont.: In the context of aerobic endurance: <ul style="list-style-type: none"> • multi-stage fitness test • definition of VO₂ max. 	<ul style="list-style-type: none"> • Tutor presentation: using PowerPoint or other presentation materials, followed by group discussion. • Group activity: learners to complete the test (provided no underlying health concerns) during lesson time and interpret their results (provided it is safe for them to do so). • Further supporting information on this test method may be found at: www.thebeepetest.com/safety.html. 	Topic C.1. C.3 and C.4 have partial links with: <ul style="list-style-type: none"> • Unit 5: Training for Personal Fitness
15 (1 hour)	Topics C.1, C.3 and C.4 cont.: In the context of aerobic endurance: <ul style="list-style-type: none"> • forestry step test. 	<ul style="list-style-type: none"> • Tutor presentation: using PowerPoint or other presentation materials, followed by group discussion. • Group activity: learners to complete the test during lesson time and interpret their results. 	Topic C.1. C.3 and C.4 have partial links with: <ul style="list-style-type: none"> • Unit 5: Training for Personal Fitness
16 (1 hour)	Topics C.1, C.3 and C.4 cont.: In the context of: <ul style="list-style-type: none"> • speed: 35m sprint • speed and agility: Illinois agility run test. 	<ul style="list-style-type: none"> • Tutor presentation: using PowerPoint or other presentation materials, followed by group discussion. • Group activity: learners to complete tests during lesson time and interpret their results. 	Topic C.1. C.3 and C.4 have partial links with: <ul style="list-style-type: none"> • Unit 5: Training for Personal Fitness
17 (2 hours)	Topics C.1, C.3 and C.4 cont.: In the context of: <ul style="list-style-type: none"> • anaerobic power: vertical jump test • muscular endurance: one-minute press-up test, one-minute sit-up test. 	<ul style="list-style-type: none"> • Tutor presentation: using PowerPoint or other presentation materials, followed by group discussion. • Group activity: learners to complete tests during lesson time and interpret their results. 	Topic C.1. C.3 and C.4 have partial links with: <ul style="list-style-type: none"> • Unit 5: Training for Personal Fitness

Unit 1: Fitness for sport and exercise

Lesson	Unit content*	Activities	Links to other units
18 (2 hours)	Topics C.1, C.3 and C.4 cont.: In the context of body composition : <ul style="list-style-type: none"> • Body Mass Index (BMI) • Bioelectrical Impedance Analysis (BIA). 	<ul style="list-style-type: none"> • Tutor presentation: using PowerPoint or other presentation materials, followed by group discussion. • Group activity: learners to complete the tests during lesson time and interpret their results. 	Topic C.1, C.3 and C.4 have partial links with: <ul style="list-style-type: none"> • Unit 5: Training for Personal Fitness
19 (1 hour)	Topics C.1, C.3 and C.4 cont.: In the context of body composition : <ul style="list-style-type: none"> • skinfold testing. 	<ul style="list-style-type: none"> • Tutor presentation: skinfold testing, using PowerPoint or other presentation materials, followed by group discussion. • Practical demonstration of technique from teacher/tutor or show via a video/DVD. 	Topic C.1, C.3 and C.4 have partial links with: <ul style="list-style-type: none"> • Unit 5: Training for Personal Fitness
20 (2 hours)	Topics C.1, C.3 and C.4 cont.: In the context of body composition : <ul style="list-style-type: none"> • skinfold testing. 	<ul style="list-style-type: none"> • Practical demonstration of technique from teacher/tutor. • Group activity: Determining percent body fat using the Jackson-Pollock (J-P) nomogram. 	Topic C.1, C.3 and C.4 have partial links with: <ul style="list-style-type: none"> • Unit 5: Training for Personal Fitness
TOTAL HOURS = 30			

* See the specification for full details of unit content.

** After initial input from teachers/tutors, learners should take part in each method. Through practical participation, learners will begin to appreciate links between the training methods, experience first-hand advantages/ disadvantages of each, and make the link back to fitness components and the principles of training. Practical participation could be undertaken in the learner's own time, with feed back on their training discussed verbally at the beginning of the next lesson.