



Unit title	Unit 28: Fitness Testing
Guided learning hours	60
Number of lessons	30
Duration of lessons	2 hours
Links to other units	
Unit 1: Health, Wellbeing and Sport Unit 6: Exercise and Fitness Skills Development Unit 9: Nutrition for Physical Activity and Exercise Unit 15: Developing Coaching Skills Unit 31: Influence of Technology in Sport and Physical Activity.	

Key to learning opportunities			
AW	Assignment writing	RS	Revision session
GS	Guest speaker	V	Visit
IS	Independent study	GW	Group work



Lesson	Topic	Lesson type	Suggested activities	Resources
Learning aim A: Examine a range of laboratory-based and field-based fitness tests				
1	Introduction to the unit A1 Fitness tests <ul style="list-style-type: none"> Range of fitness tests 	TP GW	<ul style="list-style-type: none"> Tutor presentation: outline the nature of the learning aims and the assessment task that learners will be expected to complete, using the specification, ensuring they understand relevant key terms from the specification. Tutor presentation: introduce learners to the concept of fitness testing and the role it plays in performance sport and in the health field. Presentation will introduce the concept of benchmarks and how they can be used: <ul style="list-style-type: none"> to judge fitness testing performance identify areas for physical development define & focus future training programme Presentation reviews the concept of body composition & the role it plays in sport and health assessment. <ul style="list-style-type: none"> tutor will cover the different methods of assessing body composition, (including how to take skinfold caliper measurements, BIA, hydrodensitometry) Paired activity: ask learners to work in pairs to assess body composition in each other utilising the methods available to them. Ideally this will include: <ul style="list-style-type: none"> skinfold calipers bioelectrical Impedance Analysis (body fat scales etc) Plenary: Learners will compare results from utilising different methods and discuss reasons for similarities/differences 	Unit specification Presentation Body composition assessment equipment – eg body fat scales, skin calipers



Lesson	Topic	Lesson type	Suggested activities	Resources
2	A1 Fitness tests <ul style="list-style-type: none"> Range of fitness tests 	TP GW	<ul style="list-style-type: none"> Tutor presentation: Presentation reviews the concept of aerobic endurance & the role it plays in sport and health assessment. <ul style="list-style-type: none"> tutor will cover the different methods of assessing aerobic endurance (including multistage fitness test, maximal treadmill test, submaximal step test) tutor will assign roles across the group to undertake a practical delivery of the multistage fitness test tutor will organise a warmup for the group to prepare for each round of testing Group activities: learners will work in groups to deliver the multistage fitness test. Groups will act as sports scientists to deliver the test to the rest of the group, to record results and collate the data at the end of the test. <ul style="list-style-type: none"> these roles will continue to be reversed while the rest of the group act as the test subjects. Plenary: Learners will discuss the nature of the test, its suitability for different populations, results compared to benchmarks 	Presentation Test protocol Resources required for multistage fitness test (test CD, measuring tape, cones, recording sheets, normative value tables suitable exercise space) http://www.bleeptests.com/
3	A1 Fitness tests <ul style="list-style-type: none"> Range of fitness tests 	TP GW	<ul style="list-style-type: none"> Tutor presentation: Presentation revisits the concept of aerobic endurance & the role it plays in sport and health assessment and the role that submaximal testing plays in the assessment of aerobic endurance. Paired activity: ask learners to work in pairs to deliver a submaximal step test (such as the Harvard Step Test), acting as both tester/results recorder and participant 	Presentation Test protocol Resources required for multistage fitness test (metronome, test recording, measuring tape, step, recording sheets, normative value



Lesson	Topic	Lesson type	Suggested activities	Resources
			<ul style="list-style-type: none"> ○ learners will discuss the nature of the test, its suitability for different populations, results compared to benchmarks ● Group activities: groups to reconvene and discuss the comparisons between the multistage fitness test & step test in the prediction of aerobic performance 	tables suitable exercise space)
4	A1 Fitness tests <ul style="list-style-type: none"> ● Range of fitness tests 	GS	<ul style="list-style-type: none"> ● Guest speaker: head coach/fitness coach from a local team sport organisation or National Governing Body. Guest speaker will provide an overview of the importance of fitness testing in their sport and how they use it to develop performance & how they determine participant development needs within their sporting environment. 	Access to coaching speaker
5	A2 Advantages & disadvantages of different tests <ul style="list-style-type: none"> ● Validity ● Reliability 	GW	<ul style="list-style-type: none"> ● Group activity: tutor to set up a classroom based multiple trial test of accuracy (such as throwing an object at a target) using multiple subjects <ul style="list-style-type: none"> ○ the conditions of the test will deliberately vary for the volunteers (that might include distance thrown, type of projectile, size of target) ○ the scores will be recorded and compared intra-personally and conclusions drawn from the results as to the skill/accuracy of the highest performing subjects etc ● Tutor-led discussion: lead the learners in a discussion around the nature of the task – the instructions, methods etc to highlight errors and inconsistencies that can have implications on the results. This being used to introduce and illustrate the key principles relating to reliability and validity 	Relevant materials for the group task Presentation



Lesson	Topic	Lesson type	Suggested activities	Resources
			<ul style="list-style-type: none"> ● Paired activity: learners to review how these concepts apply to the body composition & aerobic endurance assessments completed in the module to date 	
6	A1 Fitness tests <ul style="list-style-type: none"> ● Range of fitness tests 	TP GW	<ul style="list-style-type: none"> ● Tutor presentation: Presentation reviews the concept of speed & the role it plays in sport and health assessment. <ul style="list-style-type: none"> ○ tutor will cover the different methods of assessing speed (considering duration/distance of sprint in relation to the sporting activity, effects of fatigue, work:rest ratio) ○ tutor will assign roles across the group to undertake a practical delivery of a sprint test (this may include the use of timing gates if accessible) ○ tutor will organise a thorough warmup for the group to prepare for each round of testing ● Group activities: learners will work in groups to deliver a sprint test using a variety of distances. Groups will act as sports scientists to deliver the test to the rest of the group, to record results and collate the data at the end of the test. <ul style="list-style-type: none"> ○ these roles will continue to be reversed while the rest of the group act as the test subjects. ● Tutor-led discussion: lead the learners in a discussion around the nature of the test, its suitability for different populations, results compared to benchmarks, how reliability and validity were controlled during the test 	Presentation Test protocol Resources required for sprint test (timing gates (if accessible) stopwatch, measuring tape, recording sheets, normative value tables suitable exercise space)
7	A1 Fitness tests <ul style="list-style-type: none"> ● Range of fitness tests 	TP GW	<ul style="list-style-type: none"> ● Tutor presentation: Presentation reviews the concept of power & the role it plays in sport and health assessment. 	Presentation Test protocol



Lesson	Topic	Lesson type	Suggested activities	Resources
			<ul style="list-style-type: none"> ○ tutor will cover the different methods of assessing power (including the different tests (vertical jump, Wingate test) considering the muscle groups being developed, effects of fatigue, work:rest ratio) ○ tutor will assign roles across the group to undertake a practical delivery of the vertical jump test (this may include the use of electronic equipment (e.g. Optojump, jump mat) if accessible) ○ tutor will organise a thorough warmup for the group to prepare for each round of testing ● Group activities: learners will work in groups to deliver a vertical jump test. Groups will act as sports scientists to deliver the test to the rest of the group, to record results and collate the data at the end of the test. <ul style="list-style-type: none"> ○ these roles will continue to be reversed while the rest of the group act as the test subjects. ● Tutor-led discussion: lead the learners in a discussion around the nature of the test, its suitability for different populations, results compared to benchmarks, how reliability and validity were controlled during the test 	Resources required for vertical jump test (Electronic equipment (e.g. Optojump/jump mat if accessible), wall mounted jump measure (eg Tip2Tip) measuring tape, chalk recording sheets, normative value tables suitable exercise space)
8	A1 Fitness tests <ul style="list-style-type: none"> ● Range of fitness tests 	TP GW	<ul style="list-style-type: none"> ● Tutor presentation: Presentation revisits the concept of power & the role it plays in sport and health assessment. <ul style="list-style-type: none"> ○ tutor will assign roles across the group to undertake a practical delivery of the Wingate test ○ tutor will organise a thorough warmup for the group to prepare for each round of testing 	Presentation Test protocol Resources required for Wingate test cycle ergometer, testing software (if accessible)



Lesson	Topic	Lesson type	Suggested activities	Resources
			<ul style="list-style-type: none"> ● Group activities: learners will work in groups to deliver a Wingate test. Groups will act as sports scientists to deliver the test to the rest of the group, to record results and collate the data at the end of the test. <ul style="list-style-type: none"> ○ these roles will continue to be reversed while the rest of the group act as the test subjects. ● Tutor-led discussion: lead the learners in a discussion around the nature of the test, its suitability for different populations, results compared to benchmarks, how reliability and validity were controlled during the test <ul style="list-style-type: none"> ○ discuss the comparisons between the results of the two tests of power 	stopwatch, recording sheets, normative value tables suitable exercise space)
9	A1 Fitness tests <ul style="list-style-type: none"> ● Range of fitness tests 	GS	<ul style="list-style-type: none"> ● Guest speaker: head coach/fitness coach from a local individual sport organisation or National Governing Body. Guest speaker will provide an overview of the importance of fitness testing in their sport and how they use it to develop performance & how they determine participant development needs within their sporting environment. 	Access to coaching speaker
10	A1 Fitness tests <ul style="list-style-type: none"> ● Range of fitness tests 	TP GW	<ul style="list-style-type: none"> ● Tutor presentation: Presentation reviews the concept of strength & the role it plays in sport and health assessment. <ul style="list-style-type: none"> ○ tutor will cover the different methods of assessing power (including the different tests (1 rep max, grip dynamometer) considering the muscle groups being developed, effects of fatigue, work:rest ratio) 	Presentation Test protocols Grip dynamometers, access to appropriate weight training equipment, recording sheets, normative value



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			<ul style="list-style-type: none"> ○ tutor will assign roles across the group to undertake a practical delivery of the 1 rep max test & grip dynamometer ○ tutor will organise a thorough warmup for the group to prepare for each round of testing ● Group activities: learners will work in pairs to complete the grip dynamometer & 1 rep max test for pre-determined exercises (eg bench press/leg press etc). Groups will act as sports scientists to deliver the test to the rest of the group, to record results and collate the data at the end of the test. <ul style="list-style-type: none"> ○ these roles will continue to be reversed while the rest of the group act as the test subjects. ● Tutor-led discussion: lead the learners in a discussion around the nature of the tests, their suitability for different populations, results compared to benchmarks, how reliability and validity were controlled during the tests 	<p>tables suitable exercise space)</p>
11	<p>A1 Fitness tests</p> <ul style="list-style-type: none"> ● Range of fitness tests 	<p>TP GW</p>	<ul style="list-style-type: none"> ● Tutor presentation: Presentation reviews the concept of muscular endurance & the role it plays in sport and health assessment. <ul style="list-style-type: none"> ○ tutor will cover the different methods of assessing power (including the different tests (1-minute press-ups, 1-minute sit ups) considering the muscle groups being developed, effects of fatigue, work:rest ratio) ○ tutor will assign roles across the group to undertake a practical delivery of the press up/sit up tests ○ tutor will organise a warmup for the group to prepare for each round of testing 	<p>Presentation Test protocols Stopwatch, mats, recording sheets, normative value tables</p>



Lesson	Topic	Lesson type	Suggested activities	Resources
			<ul style="list-style-type: none"> ● Group activities: learners will work in pairs to complete the 1-minute press up & sit up tests. Groups will act as sports scientists to deliver the test to the rest of the group, to record results and collate the data at the end of the test. <ul style="list-style-type: none"> ○ these roles will continue to be reversed while the rest of the group act as the test subjects. ● Tutor-led discussion: lead the learners in a discussion around the nature of the tests, their suitability for different populations, results compared to benchmarks, how reliability and validity were controlled during the tests 	
12	<p>A2 Advantages & disadvantages of different tests</p> <ul style="list-style-type: none"> ● Wider issues 	TP GW	<ul style="list-style-type: none"> ● Tutor presentation: Presentation reviews the concept of flexibility & the role it plays in sport and health assessment. <ul style="list-style-type: none"> ○ tutor will cover the protocols involving the sit and reach test ○ tutor will assign roles across the group to undertake a practical delivery of the press up/sit up tests ○ tutor will organise a warmup for the group to prepare for each round of testing ● Group activities: learners will work in pairs to complete the sit and reach test. Groups will act as sports scientists to deliver the test to the rest of the group, to record results and collate the data at the end of the test. <ul style="list-style-type: none"> ○ these roles will continue to be reversed while the rest of the group act as the test subjects. ● Tutor-led discussion: lead the learners in a discussion around the nature of the test, suitability for different populations, results 	Sit & reach box, mats, recording sheets, normative value tables suitable exercise space



Lesson	Topic	Lesson type	Suggested activities	Resources
			<p>compared to benchmarks, how reliability and validity were controlled during the test</p> <ul style="list-style-type: none"> • Group discussion: summary discussion around the tests covered across the module to date, looking at how easy they were to administer, the knowledge and skills required, the feasibility of using with different groups (sizes, ages, abilities etc) 	
13-14	Assessment of learning aim A	AW	<ul style="list-style-type: none"> • Individual activity: time allocated for learners to write Assignment 1. Learners to be given access to computers with internet access, textbooks, journals and magazines. 	Assignment brief Computers for internet research and assignment completion
15	Assessment of learning aim A	AW	<ul style="list-style-type: none"> • Individual activity: delivery of presentations looking at the different types of fitness tests 	PC, presentation software, flip charts
Learning aim B: Use health screening techniques and fitness tests for a specified purpose				
16	<p>B1 Health screening procedures</p> <ul style="list-style-type: none"> • Health screening questionnaires. 	TP GW	<ul style="list-style-type: none"> • Tutor presentation: tutor will introduce the concept of health screening and the different aspects that play a part in it. The presentation will focus on the confidential nature of the personal information and the clarity of information the client needs to be able to consent to being subjected to testing. Areas to be included: <ul style="list-style-type: none"> ○ confidentiality ○ informed consent ○ cultural sensitivity ○ medical history ○ medical referral 	<p>Presentation</p> <p>Flip chart/pens to record group activity</p> <p>Examples of health screening questionnaire</p>



Lesson	Topic	Lesson type	Suggested activities	Resources
			<ul style="list-style-type: none"> ● Paired activity: learners will be invited to work in pairs to produce a health screening questionnaire to determine the types of questions that would be appropriate ● Tutor-led discussion: lead the learners in a discussion around the content of their questionnaires, looking at examples of good practice 	
17	B1 Health screening procedures <ul style="list-style-type: none"> ● Client consultation 	TP GW	<ul style="list-style-type: none"> ● Tutor presentation: tutor will provide an overview of the communication skills needed to conduct an effective client consultation. Tutor will cover the importance of: <ul style="list-style-type: none"> ○ questioning skills ○ listening skills ○ non-verbal communication ● Group activities: in small groups, learners will role play a client consultation, taking the parts of client, the health screener and observer(s). After each consultation, all parties should feed in their views of what happened and develop an understanding of what the ideal consultation would look & feel like <ul style="list-style-type: none"> ○ the activity would be repeated so each group member can experience each role ● Tutor-led review: to discuss the group findings from the role play activity and to reinforce the key points relating to effective communication 	Presentation
18-19	B2 Health monitoring tests	GW	<ul style="list-style-type: none"> ● Tutor presentation: tutor will provide an overview of the main health monitoring tests: <ul style="list-style-type: none"> ○ heart rate 	Presentation Stopwatch, tape measure, scales,



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			<ul style="list-style-type: none"> ○ blood pressure ○ lung function ○ waist-to-hip ratio ○ body mass index <ul style="list-style-type: none"> ● Tutor to demonstrate accurate measurement and discuss why these measures are relevant from a health perspective ● Paired activity: learners will be invited to work in pairs to practice administering the health monitoring tests on each other 	spirometer, sphygmomanometer
20	B3 Fitness tests <ul style="list-style-type: none"> ● Tests & preparation 	TP GW	<ul style="list-style-type: none"> ● Tutor presentation: to focus on the concept of health-related fitness and discuss how fitness tests can be used to assess health related fitness parameters ● Group activities: in small groups, learners will discuss the fitness testing battery completed in the early part of the module and build a battery that would be appropriate to measure health related fitness – including a rationale as to why they are appropriate. ● Tutor-led review: to discuss the group findings from the testing battery discussions 	Presentation
21	B4 Administration & test screening <ul style="list-style-type: none"> ● Tests & preparation 	GS	<ul style="list-style-type: none"> ● Guest speaker: a fitness instructor from a local GP referral scheme to speak about their approach to client consultations, and health assessments. They should cover: <ul style="list-style-type: none"> ○ pre-test procedures. ○ test sequence. ○ test protocols. ○ health and safety. ○ recording test results. 	Presentation Access to fitness instructor speaker



Lesson	Topic	Lesson type	Suggested activities	Resources
			<ul style="list-style-type: none">○ reasons to terminate a fitness test.○ professional conduct, decency and confidence.	



Lesson	Topic	Lesson type	Suggested activities	Resources
Learning aim C: Interpret the results of fitness tests and health screening techniques for a specified purpose				
22	<p>C1 Interpret results against normative data</p> <ul style="list-style-type: none"> • Compare and make judgements • Accepted health ranges 	TP GW	<ul style="list-style-type: none"> • Tutor presentation: tutor to present an overview of the importance of fitness testing data and how to analyse testing data and draw conclusions • The importance of norm data should be stressed here, linking back to the experiences from earlier in the module and how the norm tables were researched and used • The presentation will look at assessment from a health and a sports performance perspective, looking at: <ul style="list-style-type: none"> ○ population norms ○ norms for sports performers ○ norms for elite athletes. ○ optimal health ranges ○ intentions and goals • Group activities: in small groups, learners will discuss a sample of pre-prepared fitness assessment data, comparing against the appropriate norm tables <ul style="list-style-type: none"> ○ learners need to analyse & draw conclusions from the data and make connections between results and the suggested plans on how to develop. • Tutor-led discussion: to pull other the views of the groups and review the accuracy and appropriateness of the analysis and judgements 	Presentation Pre-prepared data sheets Norm tables



Lesson	Topic	Lesson type	Suggested activities	Resources
23	C2 Feedback • Feedback	TP GW	<ul style="list-style-type: none"> • Tutor presentation: tutor to present an overview of the importance of the delivery of feedback, discussing the principles of how to provide feedback, the importance of empathy, types of language and different methods this feedback may take. • Paired activity: learners will be invited to work in pairs to role play the provision of feedback to each other based on the pre-prepared fitness assessment data used in the previous session. An observer should provide extra feedback on the process, or perhaps the session could be video recorded and reviewed • Tutor-led discussion: to pull other the views of the groups on the feedback and to consider the different ways that further support could be gained by the client thorough onward referrals 	Presentation Pre-prepared data sheets Norm tables
24	C2 Feedback	GS	<ul style="list-style-type: none"> • Guest speakers: Invite a panel of individuals who have received health assessments, for them to share their experiences of the process. <ul style="list-style-type: none"> ○ the main focus of the presentations is around how the health professionals have communicated with the client, and how they were provided feedback on their test results and the monitoring of their progress 	Access to guest speakers
25	Assessment of learning Aims B & C	IS	<ul style="list-style-type: none"> • Completion of initial health screening with client 	Health screening protocol
26-27	Assessment of learning Aims B & C	IS	<ul style="list-style-type: none"> • Delivery of test battery with client 	Access to the resources required for defined test battery



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28-30	Assessment of learning Aims B & C	AW	<ul style="list-style-type: none"> • Individual activity: time allocated for learners to write Assignment 2. Learners to be given access to computers with internet access, textbooks, journals and magazines. 	Assignment brief Computers for internet research and assignment completion

Pearson is not responsible for the content of any external internet sites. It is essential for tutors to preview each website before using it in class so as to ensure that the URL is still accurate, relevant and appropriate. We suggest that tutors bookmark useful websites and consider enabling learners to access them through the school/college intranet.