

Unit 4: Physical Preparation, Health and Wellbeing

Delivery guidance

Approaching the unit

This unit will allow learners to study the components of fitness and lifestyle factors. They will develop skills in improving personal fitness and meet the fitness entry requirements of uniformed protective services. Learners will understand how to lead a healthy lifestyle and how to train effectively for personal fitness and as members of the uniformed protective services. Learners will explore different types of training and how each type is used to improve an individual's health and wellbeing. They will examine different lifestyle factors and why they are important. Learners will look at what they need to achieve a healthy and balanced lifestyle and they will have the opportunity to take part in the different fitness tests that assess the standards set by a specific uniformed protective service.

You could deliver this unit using a mix of theory (to introduce learners to the topics listed in the unit content) and practical activities (to enable learners to undertake activities they have learned).

Delivering the Learning Aims

Learning aim A

For **Learning aim A** learners should research the different body systems, their functions and what happens to them when they undertake physical exercises. Group research could be undertaken identifying the short- and long-term effects of exercise on body systems.

Learners could explore the different components of physical and skill related fitness and how to train for them. Class discussions can be used to identify the components and how to train for them using the learners' past experiences. Learners should be given some practical experience of the different training methods.

Learning aim B

For **Learning aim B**, learners will need to research the different lifestyle factors and their effects on health and wellbeing, and different lifestyle improvement techniques. Learners will understand the different health and wellbeing assessments such as resting heart rate or BMI, and will carry out assessments to get real results. Case studies could be used in this unit looking at differing health and lifestyle factors.

Learning aim C

For **Learning aim C** learners will benefit from researching the different test requirements for the uniformed protective services. Visits to uniformed protective services will allow learners to observe and use different entry-test equipment. Guest speakers can also be useful for providing

learners with information about the different test requirements. Learners should be given the opportunity to partake in various protective service fitness tests.

Learning aim D

For **Learning aim D** learners need to explore the principles of a training programme. Tutor led discussion on the different principles could be used alongside a case study approach, where learners review training programmes of different individuals.

Summary of unit

Learning aim	Key content areas	Recommended assessment approach
A Explore components of fitness and the effect of different methods of training on body systems	A1 Key human body systems associated with physical activity A2 The components of physical fitness A3 Methods of training for physical fitness A4 The components of skill-related fitness A5 Methods of training for skill-related fitness	A report or presentation on the effectiveness of methods of training for components of fitness and their effects on body systems.
B Examine lifestyle factors that are important in maintaining health and wellbeing	B1 Lifestyle factors and their effects on health and wellbeing B2 Health and wellbeing assessment B3 Lifestyle improvement techniques	A report or presentation that evaluates personal lifestyle factors and their impact on health and wellbeing, including recommended improvements for personal health and wellbeing.
C Carry out tests for personal fitness levels and fitness requirements for entry to the uniformed protective services	C1 Carrying out fitness tests C2 Test requirements for uniformed protective services	Evidence of learners carrying out fitness tests from protective services, together with a record of the test results.
D Design a fitness programme that meets personal fitness goals for entry to the uniformed protective services	D1 Principles of fitness training programmes	A personal training fitness programme to improve personal fitness to meet uniformed protective services entry requirements, together with an evaluation of the potential effectiveness of the training programme.

Assessment guidance

The recommended assessment for this unit includes three assignments. The first assignment focuses on Learning aim A, the second on Learning aim B and the third on Learning aims C and D.

For the first assignment you could ask learners to prepare a report or presentation on the effectiveness of methods of training for components of fitness and their effects on body systems

In order to achieve Learning aim A, learners' evidence must cover at least **three** components of fitness **and** methods of training to develop these, for example a method to support muscular strength, a method to support flexibility and a method to support speed. An overview of the component and an explanation of different training methods must be given. Learners must include an appropriate understanding of the effects of different methods of training on body systems. Learners will use appropriate terminology in their explanations.

Chosen components should cover at least one skill and at least one physical component.

For assignment two learners should prepare a report or presentation that evaluates personal lifestyle factors and their impact on health and wellbeing, including recommended improvements for personal health and wellbeing.

For learning aim B, learners will use health and wellbeing monitoring tools such as screening questionnaires, personal assessments, health monitoring tests and mental health assessments to measure their health and wellbeing.

For the third assignment (Learning aims C and D), learners should produce evidence of carrying out fitness tests from protective services e.g. photographs, videos or learner reviews, together with a record of the test results. Learners should develop a personal training fitness programme to improve their personal fitness to meet uniformed protective services entry requirements, together with an evaluation of the potential effectiveness of the training programme.

The fitness tests should be relevant to a specific uniformed protective service's requirements and allow learners to determine their own fitness levels and goals for personal improvement to meet the entry requirements. Evidence could be in the form of annotated photographs or video evidence of practical activities, supported by observation reports and witness statements of learners demonstrating fitness tests.

Authorised Assignment Briefs for Learning Aim A and Learning Aim B and Learning Aims C and D are available on our website.

Details of links to other BTEC units and qualifications, and to other relevant units/qualifications

- Unit 2: Behaviour and Discipline in the Uniformed Protective Services
- Unit 5: Teamwork, Leadership and Communication in the Uniformed Protective Services
- Unit 10: Skills for Outdoor Activities and the Uniformed Protective Services
- Unit 11: Expedition Skills
- Unit 12: Developing Personal Fitness Programmes.

Resources

For this unit, learners must have access to:

- suitable fitness testing facilities and equipment, such as a sports hall, studio gym, sports laboratory
- appropriate testing equipment, such as sit and reach box, grip dynamometer, skinfold calipers, dumbbells, barbells, cycle ergometer, cones, mats, benches, timing gates, stopwatch
- suitable individuals and groups who can act as test subjects.

Textbooks

American College of Sports Medicine – ACSM's Guidelines for Exercise Testing and Prescription, 7th Edition (Lippincott Williams and Wilkins, 2005) ISBN 9780781745901

Bird S R, Smith A and James K – Exercise Benefits and Prescription (Nelson Thornes, 1998) ISBN 9780748733156

Coulson M – The Fitness Instructor's Handbook: A Complete Guide to Health and Fitness – Fitness Professionals (A&C Black, 2007) ISBN 9780713682250

Franks B D and Howley E T – Fitness Leader's Handbook (Human Kinetics Europe, 1998) ISBN 9780880116541

Heyward V H – Advanced Fitness Assessment and Exercise Prescription (Human Kinetics, 2006) ISBN 9780736057325

Howley E T and Franks B D – Health Fitness Instructor's Handbook (Human Kinetics Europe, 2003) ISBN 9780736042109

Volpe S L et al – Fitness Nutrition for Special Dietary Needs (Human Kinetics Europe, 2007) ISBN 9780736048125

Journals

These current journals often give case studies and up-to-date information on a range of subjects specific to the service:

FIRE: <http://www.fire-magazine.com>

Soldier: <https://www.army.mod.uk/news-and-events/soldier-magazine/>

Public Service Magazine: www.fda.org.uk/Media/Public-Service-Magazine/Public-Service-Magazine-Home.aspx

American College of Sport Medicine's Health and Fitness Journal British Medical Journal

HealthEx Specialist

Journal of Physical Activity and Health Journal of Sports Medicine and Physical Fitness

Websites

The following websites give up-to-date information on health, fitness or lifestyle specific to each service:

The British Army: <http://www.army.mod.uk>

The College of Policing: <http://www.college.police.uk>

NHS Choices: www.nhs.uk/live-well/eat-well

The Royal Marines: <http://www.royalnavy.mod.uk/careers/royal-marines/get-fit-to-join>

The Royal Navy: <http://www.royalnavy.mod.uk/Careers/How-to-Join/Get-fit-to-join>

American College of Sports Medicine: www.acsm.org

British Nutrition Foundation: www.nutrition.org.uk

Department of Health: <https://www.gov.uk/government/organisations/department-of-health-and-social-care>

Food Standards Agency: www.eatwell.gov.uk

Human Kinetics: www.humankinetics.com

The World Health Organisation: www.who.int

Top End Sports: www.topendsports.com

NHS: <https://www.nhs.uk/live-well/exercise/exercise-health-benefits/>

BUPA: <https://www.bupa.co.uk/health-information/exercise-fitness/benefits-of-exercise>

NICE guidelines: <https://www.nice.org.uk/guidance/lifestyle-and-wellbeing/physical-activity>

Videos

Relevant films make a good starting point for class discussions, enabling learners to engage with the subject: *Super Size Me* (2004), written and directed by Morgan Spurlock.

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