



# KS4 Curriculum Content

**NCFE VCERT Health and Fitness  
Level 1/2 Technical Award**

Year 10	Half Term 1 September - October		Half Term 2 October - December		Half Term 3 January - February	
Topic	<b>1.1.1 Structure of the skeleton</b> <b>1.1.2 Functions of the skeleton</b> <b>1.1.3 Types of bones</b> <b>1.1.4 Types of joints</b> <b>1.1.5 Joint actions</b> <b>1.1.6 Structure of a synovial joint (knee)</b> <b>1.1.7 Structure of the spine and posture</b>		<b>1.2.1 Types of muscle</b> <b>1.2.2 Structure of the muscular system</b> <b>1.2.3 Muscle movement and contraction</b> <b>1.2.4 Muscle fibre types</b> <b>1.3.1 Structure of the respiratory system</b> <b>1.3.2 Function of the respiratory system</b> <b>1.3.3 Lung volumes</b>		<b>1.4.1 Structure and function of the blood vessels</b> <b>1.4.2 Structure of the heart</b> <b>1.4.3 The cardiac cycle</b> <b>1.4.4 Cardiovascular measurements</b> <b>1.4.5 Blood pressure</b> <b>1.5.1 Anaerobic energy system</b> <b>1.5.2 Aerobic energy system</b>	
Vocabulary Links	cranium vertebrae scapula humerus sternum femur tibia	fibula cartilage ligaments hinge joint ball and socket joint patella	capillaries arteries veins atria ventricles systole	diastole oxygenated deoxygenated cardiac output aorta	intercostal inspiration expiration aerobic	anaerobic lactic acid trachea alveoli
NCFE Assessment Objectives	<ul style="list-style-type: none"> <li>Learners will know and understand that the skeleton is divided into two sections and should be able to locate bones listed.</li> <li>Learners will know and understand the functions of the skeletal system.</li> <li>Learners will know and understand the types of bone in the body, their primary function and how they relate to movement (as applicable). Learners should be able to give examples of each type of bone</li> <li>Learners will know and understand the types of joints in the body and be able to give examples of each type of joint.</li> <li>Learners will know and understand the following types of movement, how they relate to ball and socket and hinge joints (see section 1.1.4 Types of joints) and their application to specific actions in health and fitness.</li> <li>Learners will know and be able to locate the following structures of the knee joint and understand what their functions are.</li> <li>Learners will know that the spine is divided into regions and be able to locate each region.</li> </ul>		<ul style="list-style-type: none"> <li>Learners will know and understand the types of muscle, where they are located, their characteristics and functions.</li> <li>Learners will be able to locate the main muscles of the muscular system.</li> <li>Learners will know and understand how muscles work in antagonistic pairs to produce movement at a joint and be able to apply this principle to specific actions in health and fitness.</li> <li>Learners will know and understand the different muscle fibre types and their characteristics (colour, contraction speed and fatigue speed).</li> <li>Learners will know and understand the pathway of air through the respiratory system.</li> <li>Learners will know and understand the mechanics of breathing.</li> <li>Learners will know and understand the following lung volumes and the changes that happen from rest to participating in health and fitness activities.</li> </ul>		<ul style="list-style-type: none"> <li>Learners will know about the structure of the blood vessels and understand how structure relates to the functions of blood distribution.</li> <li>Learners will know and understand that the heart is divided into two sides (left and right) and should be able to locate the following structures.</li> <li>Learners will know and understand the order of the cardiac cycle and the pathway of deoxygenated and oxygenated blood around the heart.</li> <li>Learners will know and understand the following cardiovascular measurements, including how they are measured (limited to maximal heart rate and cardiac output) and understand how they are relevant to health and fitness.</li> <li>Learners will know and understand the two different types of blood pressure, the ranges of blood pressure classification and factors that affect blood pressure.</li> <li>Learners will know and understand the anaerobic energy system and be able to apply this to health and fitness activities.</li> <li>Learners will know and understand the aerobic energy system and be able to apply this to health and fitness activities.</li> <li>Learners will know the short term effects that health and fitness activities can have on the body and understand why each short term effect occurs.</li> </ul>	

				<ul style="list-style-type: none"> <li>Learners will know the long term effects of health and fitness activities on the body and understand why each long term effect occurs.</li> </ul>	
Assessment	End of Unit Topic Test	End of Unit Topic Test	End of Unit Topic Test	End of Unit Topic Test	
<b>Year 10</b>	Half Term 4 February – March	Half Term 5 April - May	Half Term 6 June - July		
Topic	<b>2.1.1 Short term effects of health and fitness activities</b> <b>2.1.2 Long term effects of health and fitness activities</b> <b>3.1.1 Health and fitness</b> <b>3.2.1 Health related fitness</b> <b>3.2.2 Skill related fitness</b> <b>4.1.1 The principles of training</b> <b>4.1.2 Principle of FITT</b>	<b>1.1.1 Activity levels</b> <b>1.1.2 Diet</b> <b>1.1.3 Rest and recovery</b> <b>1.1.4 Other factors</b> <b>2.1.1 Health related fitness tests</b> <b>2.1.2 Skill related fitness tests</b> <b>2.1.3 Using data</b>		<b>2.2.1 Training methods</b> <b>2.3.1 Heart rate training zones</b> <b>2.3.2 Repetitions and sets</b>	
Vocabulary Links	Health Fitness Exercise Performance flexibility muscular endurance explosive strength reaction time	agility balance cardiovascular endurance coordination strength Illinois agility speed	vitamins minerals dehydration carbohydrate protein fibre	fat sedentary diabetes self-esteem obesity Participation Rates Graphical Data	circuit training weight training heart rate continuous training interval training
NCFE Assessment Objectives	<ul style="list-style-type: none"> <li>Learners will know the long term effects of health and fitness activities on the body and understand why each long term effect occurs.</li> <li>Learners will be able to know and understand the terms health and fitness and the relationship between them.</li> <li>Learners will know and understand the five components of health-related fitness. Learners will be able to link these components to health and fitness activities and understand the effect that improvements to the component(s) have on performance in the activity.</li> <li>Learners will know and understand the six components of skill-related fitness. Learners will be able to link these components to health and fitness activities and understand the effect that improvements to the component(s) have on performance in the activity.</li> <li>Learners will know and understand the five principles of training (SPORT) and how they can be applied to health and fitness activities.</li> </ul>	<ul style="list-style-type: none"> <li>Learners will know and understand the terms active lifestyle and sedentary lifestyle, referring to current physical activity guidelines stated by the National Health Service, (NHS). Learners will be able to give examples of moderate and vigorous activities for health and fitness.</li> <li>Learners will know and understand the key nutrients and what a balanced diet consists of.</li> <li>Learners will know and understand the importance of rest and recovery for health and fitness.</li> <li>Learners will know and understand how the following lifestyle factors negatively affect health and fitness.</li> <li>Learners will know and understand how to prepare, carry out and collect data on the appropriate fitness test for each component of health-related and skill-related fitness.</li> <li>Learners will know and understand how to prepare, carry out and collect data on the appropriate fitness test for each component of health-related and skill-related fitness.</li> </ul>		<ul style="list-style-type: none"> <li>Learners will know and understand the different training methods and be able to apply them to support individual goals, through a health and fitness programme.</li> <li>Learners will know and understand heart rate training zones and be able to apply them to support individual goals, through a health and fitness programme.</li> <li>Learners will know and understand repetition and sets range and be able to apply them to support individual goals, through a health and fitness programme.</li> </ul>	

	<ul style="list-style-type: none"> <li>Learners will know and understand the principles of FITT and how they can be adapted to optimise performance in health and fitness activities.</li> </ul>		<ul style="list-style-type: none"> <li>Learners will know how to collect, use and analyse data to evaluate levels of fitness.</li> </ul>			
Assessment	End of Unit Topic Test + Full Mock Exam Paper		Mock Exam Paper		Mock Exam Paper	
<b>Year 11</b>	Half Term 1 September - October		Half Term 2 October - December		Half Term 3 January - February	
Topic	<b>3.1.1 Health and fitness analysis tools</b> <b>3.1.2 Goal setting</b> <b>4.1.1 The session card</b> <b>4.1.2 Warm up/cool down</b> <b>4.1.3 Main activity section</b> <b>EXAM PREP THROUGHOUT</b>		<b>4.2.1 Health and safety</b> <b>Synoptic project preparation</b>		<b>Synoptic project</b> <b>Unit 1 External Assessment practice for those requiring a resit</b>	
Vocabulary Links	Pulse Raiser Stretch Sports Specific Specific	Measurable Achievable Realistic Time Bound	Health Fitness Exercise Performance flexibility	agility balance cardiovascular endurance coordination strength Illinois agility speed	Health Fitness Exercise Performance flexibility	agility balance cardiovascular endurance coordination strength Illinois agility speed
NCFE Assessment Objectives	<ul style="list-style-type: none"> <li>Learners will know and understand health and fitness analysis tools, what information they collect, how to administer them and why they are used.</li> <li>Learners will know and understand the acronym SMART in relation to goal setting. Learners will be able to apply the SMART principles to set health and fitness goals based on health and fitness analysis data.</li> <li>Learners will know and understand the information that should be included in a session card.</li> <li>Learners will know and understand the purpose and importance of a warmup and cool down and be able to apply them to a health and fitness programme.</li> <li>Learners will know and understand the components of the main activity section.</li> <li>Dedicated Unit 1 external assessment preparation in lessons. Revisit of all topic areas with topic tests and past papers sourced from NCFE.</li> </ul>		<ul style="list-style-type: none"> <li>Learners will know and understand health and safety considerations needed for a health and fitness programme.</li> <li>Synoptic project released in December. Past synoptic projects examples can be sourced from NCFE and used to give students an idea of what to expect. Examples will allow students to see how to apply knowledge to a specific 'scenario'.</li> </ul>		<ul style="list-style-type: none"> <li>Students will start their synoptic project. 21 hours is allocated within lesson time to complete the project. During this time, no teaching is to take place, but students have access to all their classwork/folders.</li> <li>External assessment results released end of January.</li> <li>Any students NYA or wanting to improve their result will have to continue Unit 1 revision alongside the synoptic project.</li> </ul>	

Assessment	Mock Exam Papers + <b><u>External Assessment Exam</u></b>	<b><u>Exam Prep</u></b>	<b><u>Exam Prep</u></b>
<b>Year 11</b>	Half Term 4 February – March	Half Term 5 April - May	Half Term 6 June - July
Topic	<b><u>Synoptic project</u></b> <b><u>External Assessment Exam</u></b> <b><u>RESIT</u></b>	<b><u>Synoptic project RESITs</u></b>	N/A
Vocabulary Links	Area Specific	Area Specific	N/A
NCFE Assessment Objectives	<ul style="list-style-type: none"> <li>• First submission of synoptic project due end of March. Students will receive some form of feedback in order to improve upon their first grading.</li> </ul>	<ul style="list-style-type: none"> <li>• Second submission of synoptic project due end of May.</li> </ul>	N/A
Assessment	<b><u>Synoptic project</u></b> <b><u>Exam Prep</u></b>	<b><u>Synoptic project</u></b>	N/A