WFA Progression Map - planning for knowledge/skills etc to build & accumulate sequentially over time

WESTON FAVELL ACADEMY

Key: ***Bold*** writing shows development or progression from previous year. *<u>Underline</u> shows cross-over of key concepts with other end-points

Subject: SPORT SCIENCE			**Open Faculty**		
End points	**Year 9**	**Year 10**	**Year 11**	**Year 12**	**Year 13**
Develop knowledge and understanding of training principles and how to keep in peek physical condition Explore how the body changes when we exercise	the principles of training in a sporting context aerobic and anaerobic exercise the components of fitness specific training methods for each of the fitness components tests which assess fitness: -Maximal / sub maximal testing -validity and reliability of testing design a fitness training programme: gather details about the subject the programme is for clarify the aims of the training programme	benefits of cardio-respiratory fitness in everyday life benefits of muscular strength and flexibility benefits of muscular endurance different short-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems and reasons for these ways to measure and record the short-term effects of physical activity on the musculo-skeletal and cardiorespiratory systems long-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems and reasons for these		Vascular shunt mechanism and the role of arterioles and pre-capillary sphincters The impact of physical activity, training and lifestyle on the cardiovascular system Respiratory muscles used during exercise and the mechanics of breathing Tidal volume, breathing frequency and minute Ventilation The three energy systems The energy continuum and how intensity and duration of exercise determines which energy system is predominant The impact of physical activity, training and	

	set realistic goals which can be measured (SMART Target setting duration of the training programme suitability of activities organisation of activities adaptability progression (e.g. applies the FITTA principle evaluate the effectiveness of the training programme, and suggest area for improvement	ways to measure and record the long-term effects of physical activity on the musculo-skeletal and cardiorespiratory systems		lifestyle on the skeletal system	
	NC/Spec coverage RO42/RO43	**NC/Spec coverage** RO42/43	**NC/Spec coverage**	**NC/Spec coverage** UNIT 1	**NC/Spec coverage**
Develop knowledge and understanding of the body`s systems Understand how to investigate and research into	how to interpret the results of fitness tests: -against normative -validity - reliability	key components of the musculo-skeletal system and its function key components of cardio-respiratory system and its function the role of the musculo-skeletal		The axial and appendicular skeletons The functions of the skeleton and the link to types of bone Classifications of joint	

both anatomical and physiological aspects of sport science and includes the role of scientific method and data analysis		system in producing movement the role of the cardio-respiratory system during physical activity different short-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems and reasons for these ways to measure and record the short-term effects of physical activity on the musculo-skeletal and cardiorespiratory systems long-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems and reasons for these ways to measure and record the long-term effects of physical activity on the musculo-skeletal and cardiorespiratory systems		The types of synovial joint and their structure Joint movements Structure and function of the vertebral column The impact of physical activity, training and lifestyle on the skeletal system Main muscles acting at synovial joints Types of muscle function and contraction Structure and function of muscle fibre types and the link between mix of fibre types and performance The structures of the heart and their roles. Stroke volume, heart rate and cardiac output, Structure of blood vessels and the	

				components and their functions of blood Vascular shunt mechanism and the role of arterioles and pre-capillary sphincters The impact of physical activity, training and lifestyle on the cardiovascular system The structures of the lungs and their roles Respiratory muscles used during exercise and the mechanics of breathing Tidal volume, breathing frequency and minute Ventilation The three energy systems The energy continuum and how intensity and duration of exercise determines which energy system is predominant	
	NC/Spec coverage RO42/43	**NC/Spec coverage** RO42/43	**NC/Spec coverage**	**NC/Spec coverage** UNIT 1	**NC/Spec coverage**

Develop a deep understanding of the relationship between sport psychology and the pressure of professional sports and the control of human behaviours			Personality types and their effects on sports performance intrinsic motivation extrinsic motivation achievement motivation implications for sport and exercise involvement types of aggression reasons for aggression theories of aggression explanations of arousal and theories into arousals cause and effect Anxiety and measuring anxiety the use of goal setting for motivation in sport, the use of mental rehearsal and imagery in sport the use of relaxation techniques in sport		Types of motivation, Goal setting, Differences in motivation between general participation compared to elite Differences in goals between general participation compared to elite performers Weiner's model of attribution The effect of different attributions on sport and exercise performance Attribution retraining Understand the effects of stress, anxiety and arousal in sport and exercise Stages of group development Cohesion and factors affecting cohesion Steiner's model of group effectiveness

					Methods for improving team cohesion Impact of sport and exercise on mental health Use of exercise to treat certain psychosomatic illnesses Different psychological impacts of sport and exercise for elite performers and general participants
	NC/Spec coverage	**NC/Spec coverage**	**NC/Spec coverage** RO44	**NC/Spec coverage**	**NC/Spec coverage** UNIT 17
Learn how to prepare participants to take part in sport and how to respond to common injuries		extrinsic factors which can influence the risk of injury intrinsic factors which can influence the risk of injury psychological factors posture and causes of poor posture. sports injuries related to poor posture: -pelvic tilt -lordosis	**extrinsic factors which can influence the risk of injury** **intrinsic factors which can influence the risk of injury** **psychological factors** **posture and causes of poor posture. sports injuries related to poor posture:** **-pelvic tilt** **-lordosis**	The definitions of chronic and acute sports injury 1.2 Common causes of chronic sports injuries, Common causes of acute sports injuries The signs and symptoms of common chronic sports injuries The signs and symptoms of common acute sports injuries	

		-kyphosis - round shoulder - scoliosis the physical benefits of a warm up the psychological benefits of a warm up key components of a warm up physical benefits of a cool down key components of a cool down specific needs which a warm up and cool down must consider acute and chronic injuries types, causes and treatment of common sports injuries how to respond to injuries and medical conditions in a sporting context Emergency Action Plans (EAP) in a sporting context	**-kyphosis** **- round shoulder** **- scoliosis** **the physical benefits of a warm up** **the psychological benefits of a warm up** **key components of a warm up** **physical benefits of a cool down** **key components of a cool down** **specific needs which a warm up and cool down must consider** **acute and chronic injuries** **types, causes and treatment of common sports injuries** **how to respond to injuries and medical conditions in a sporting context** **Emergency Action Plans (EAP) in a sporting context**	Possible psychological effects of suffering a sports Extrinsic factors which can influence the risk of injury Intrinsic factors which can influence the risk of injury factors Steps that can be taken to minimise the risk of sports injuries Safety measures which are intrinsic to sports Appropriate courses of action immediately following an acute sports injury Emergency Action Plan (EAP) The different agencies and professionals that could be involved in the treatment of sports injuries The way in which each of the identified agencies or professionals could	

		the symptoms of common medical conditions and how to respond to these medical conditions	**the symptoms of common medical conditions and how to respond to these medical conditions**	support rehabilitation from sports injury Under what circumstances an injured person might seek out external help The different types of treatment that can be used to support rehabilitation from sports injury, The physiological response to each of the rehabilitation techniques identified The indications for and against each identified treatment for a range of common sports injuries Different grades of muscle injury Different phases of treatment Exercises that can be used as part of a rehabilitation programme	

				planning a sports injury rehabilitation Programme Assessing the needs of a client,	
	NC/Spec coverage	**NC/Spec coverage** RO41	**NC/Spec coverage** RO41	**NC/Spec coverage** UNIT 1/2	**NC/Spec coverage** UNIT 1/2