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| **BTEC Level 3**  Component overview here | | |
|  | **Year 12** | **Year 13** |
| **Autumn 1 – 7 weeks (17.5 hrs)** | Theory (7 x 150 mins)  **Unit 1- Anatomy and Physiology (Exam assessed unit in Jan)**  **(A) The effects of exercise and sports performance on the skeletal system**   * **Structure of the Skeletal System (A1)**   ***Major bones, Types of bones, Area of Skeleton and Process of bone growth.***   * **Function of the Skeletal System (A2)**   ***Functions of skeleton when performing sporting techniques. (Support, protection, Attachment, leverage etc)***   * **Main functions of different bone types (A2)**   ***Long bones, short bones, flat and sesamoid bones.***   * **Joints (A3)**   ***Joints of upper and lower skeleton, classification of joints, types of joints, synovial joints and range of motion at different joints.***   * **Responses of the skeletal system to a single sport or exercise session (A4)**   ***Simulated increase of mineral uptake in bones due to weight-bearing exercise***   * **Adaptions to the skeletal system to exercise (A5)**   ***The impact of long-term effects of exercise on sports performance (Skeletal adaptations – increased bone strength, increased ligament strength)***   * **Additional factors affecting the skeletal system (A6)**   ***Skeletal diseases (osteoporosis, arthritis) and what sport offsets them.***  ***Age- – young children and resistance training issues stunting bone growth.***  **(B) The effects of exercise and sports performance on the muscular system**   * **Characteristics and functions of different types of muscles (B1)**   ***Cardiac, Skeletal and Smooth***   * **Major skeletal muscles of the muscular system (B2)**   ***Major skeletal muscles and their combined use in sporting actions (e.g. deltoids, bicep, triceps, abdominals, obliques etc.)***   * **Antagonistic muscle pairs (B3)**   ***Agonist, Antagonist, Synergist, Fixator.***   * **Types of skeletal muscle contraction (B4)**   ***Isometric, concentric and eccentric***   * **Fibre Types (B5)**   ***Fibre type recruitment during exercise and sports performance.***  ***Characteristics of each muscle fibre type (type 1, type 2a, type 2x)***  ***Nervous control of muscle contraction.***   * **Responses of the muscular system to a single sport or exercise session (B6)**   ***Increased blood supply***  ***Increased muscle temperature***  ***Increased muscle pliability***  ***Lactate***  ***Microtears***   * **Adaptions of the muscular system to exercise (B7)**   ***Hypertrophy***  ***Increased tendon strength***  ***Increase in myoglobin stores***  ***Mitochondria***  ***Storage of glycogen***  ***Fat storage***  ***Lactate tolerance***   * **Additional factors affecting the muscular system (B8)**   ***Age- effect of age on loss of muscle mass***  ***Cramp***  **(C) The effects of exercise and sports performance on the respiratory system**   * **Structure of the respiratory system (C1)**   ***Structure including- nasal cavity, epiglottis, pharynx, trachea etc.***  ***Intercostal muscles***   * **Function (C2)**   ***Mechanisms of breathing***  ***Gaseous exchange***   * **Lung volumes (C3)**   ***Tidal volume***  ***Vital capacity***  ***Residual volume***  ***Total lung volume***  ***Minute ventilation***   * **Control of breathing (C4)**   ***Neural (medulla oblongata)***  ***Chemical (chemoreceptors)*** | Theory (7 x 150 mins)  **Unit 2- Fitness Training and Programming for Health, Sport and Wellbeing**  **(A) Examine lifestyle factors and their effect on health and well-being**   * **Positive lifestyle factors and their effects on health and well-being (A1)**   **Exercise/physical activity**  **Balanced diet**  **Positive risk taking**  **Government recommendations/ guidelines**   * **Negative lifestyle factors and their effect of health and wellbeing (A2)**   ***Smoking***  ***Alcohol***  ***Stress***  ***Sleep***  ***Sedentary lifestyle***   * **Lifestyle modification techniques (A3)**   ***Common barriers to change***  ***Strategies to increase physical activity levels***  ***Smoking cessation strategies***  ***Strategies to reduce alcohol consumption***  ***Stress management techniques***  **(B) Examine lifestyle factors and their effect on health and well-being**   * **Screening Process (B1)**   ***Screening questionnaires***  ***Legal considerations***   * **Health monitoring tests (B2)**   ***Blood pressure***  ***Resting heart rate***  ***Body mass index (BMI)***  ***Waist to hip ratio***   * **Interpreting the results of health monitoring tests (B3)**   ***Interpret results against normative data***  ***Compare and make judgements against population norms***  ***Norms for sports performers***  ***Norms for elite athletes***  ***Accepted health ranges***  **(C) Examine lifestyle factors and their effect on health and well-being**   * **Common terminology (C1)**   ***Recommended daily allowance***  ***Energy measures***  ***Energy balance***   * **Components of a balanced diet (C2)**   ***Macronutrients***  ***Micronutrients***  ***Hydration***  ***Dehydration and Hydration***   * **Nutritional strategies for individuals taking part in training programmes (C3)**   ***Adapting diet to gain or lose weight***  ***Ergogenic aids (gels and bars, protein drinks and carbo loading)***  ***Sports drink (isotonic, hypertonic and hypotonic)*** |
| **Autumn 2 – 7 weeks (17.5 hrs)** | Theory (7 x 150 mins)  **Unit 1- Anatomy and Physiology (Exam assessed unit in Jan)**   * **Responses of the respiratory system to a single sport or exercise session (C5)**   ***Increase in breathing rate***  ***Increased tidal volume***   * **Adaptions of the respiratory system to exercise**   ***Vital capacity***  ***Strength of respiratory muscles***  ***Oxygen and carbon dioxide diffusion rate***   * **Additional factors affecting the respiratory system**   ***Asthma***  ***Altitude/ partial pressure***  **(D) The effects of exercise and sports performance on the respiratory system**   * **Structure of the cardiovascular system (D1)**   ***Structure (atria, ventricles, bicuspid and tricuspid valves, septum etc)***  ***Structure of blood vessels***  ***Composition of blood***   * **Function of the cardiovascular system (D2)**   ***Delivery of oxygen and nutrients***  ***Removal of waste products***  ***Thermoregulation***  ***Fight infection***  ***Clot blood***   * **Nervous control of the cardiac cycle (D3)**   ***Conduction process ( SAN, AVN, Bundle of His and Purkinje fibres)***  ***Sympathetic and parasympathetic nervous system***   * **Responses of the cardiovascular system to a single sport or exercise session (D4)**   ***Anticipatory heart rate***  ***Heart rate***  ***Cardiac output***  ***Blood pressure***  ***Redirection of blood flow***   * **Adaptions of the cardiovascular system (D5)**   ***Cardiac hypertrophy***  ***Stroke volume***  ***Resting heart rate***  ***Capillarisation***  ***Blood pressure***  ***Recovery time***  ***Blood volume***   * **Additional factors affecting the cardiovascular system (D6)**   ***Sudden arrhythmic death syndrome***  ***High and low blood pressure***  ***Hyperthermia/ hypothermia***  **(E) The Effects of Exercise and Sports Performance on the Energy System**   * **The role of ATP in exercise (E1)**   ***Immediately accessible energy for exercise***  ***Breakdown and resynthesis of ATP for muscle contraction***   * **The ATP-PC system in exercise and sports performance (E2)**   ***Anaerobic***  ***Chemical source (phosphate and creatine)***  ***Resysnthesis of ATP***  ***Recovery time***  ***Contribution to energy for exercise***   * **The lactate system in exercise and sports performance (E3)**   ***Anaerobic***  ***Anaerobic glycolysis***  ***Recovery time***  ***Contribution to energy for exercise***   * **The aerobic system in exercise and sports performance (E4)**   ***Aerobic site of reaction (mitochondria)***  ***Food fuel source***  ***Aerobic glycolysis, krebs cycle, electron transport chain***  ***Recovery time***  ***Contribution to energy for exercise***   * **Adaptions of the energy system to exercise (E5)**   ***ATP-PC***  ***Creatine stores***  ***Lactate system***  ***Tolerance to lactate***  ***Aerobic energy system***  ***Fats as an energy source***  ***Storage of glycogen***  ***Number of mitochondria***   * **Additional factors affecting the energy systems (E6)**   ***Diabetes (hypoglycaemic attack)***  ***Childrens lack of lactate*** | Theory (7 x 150 mins)  **Unit 2- Fitness Training and Programming for Health, Sport and Wellbeing**  **(D) Examine training methods for different components of fitness**   * **Components of fitness to be trained (D1)**   ***Physical fitness***  ***Aerobic endurance***  ***Strength***  ***Muscular endurance***  ***Flexibility***  ***Speed***  ***Body composition***   * **Skill- related fitness (D1.1)**   ***Agility***  ***Balance***  ***Coordination***  ***Reaction time***  ***Power***   * **Training Methods for physical fitness- related components (D2)**   ***Appropriate training methods to be included in the design of a training programme. Advantages and disadvantages of training methods.***   * **Aerobic endurance training methods (D2.1)**   ***Principles of aerobic training***  ***Types of aerobic endurance training methods (continuous training, fartlek training, interval training and circuit training)***  ***Equipment required for aerobic endurance training.***   * **Muscular strength training methods (D2.2)**   ***Principles when training for strength***  ***Methods***  ***Equipment***   * **Muscular endurance training methods (D2.3)**   ***Principles when training for endurance***  ***Methods***  ***Equipment***   * **Core Stability training methods (D2.4)**   ***Principles***  ***Methods***  ***Equipment***   * **Flexibility training methods (D2.5)**   ***Principles of flexibility***  ***Static, active, passive***  ***Dynamic***  ***Equipment***   * **Speed Training methods (D2.6)**   ***Principles***  ***Hollow sprints***  ***Acceleration sprints***  ***Interval training***  ***Resistance drills***  ***Equipment***   * **Training methods for skill-related fitness components (D3)**   ***Appropriate training methods included in the design of a training programme.***   * **Agility training methods (D3.1)**   ***Exercises which involve change in body position quickly and with control.***  ***SAQ***  ***Sport specific drills***   * **Balance training methods (D3.2)**   ***Static balance***  ***Dynamic balance***  ***Method***   * **Coordination training methods (D3.3)**   ***Exercises which involve one or more body parts together.***  ***Sports specific activities***   * **Reaction time training methods (D3.4)**   ***Reaction drills in response to an external stimulus***  ***Equipment***   * **Power Training (D3.5)**   ***Plyometrics***  ***Equipment***  **(E) Understand training programme design**   * **Principles of fitness training programme design**   ***Aims***  ***Objectives***  ***Personal Goals***   * **Principles of training**   ***FITT Principles***  ***Additional principles of training***  ***Progression***  ***Reversibility***  ***Rest and recovery***  ***Adaption***  ***Variation***  ***Individual needs***   * **Periodisation**   ***Macrocycle***  ***Mesocycle***  ***Microcycle*** |
| **Spring 1 – 6 weeks (15 hrs)** | Theory (150 mins)  **6x150 minutes Theory**  **Unit 3- Careers in the Sports Industry (Coursework based)**   * **Scope and provision of the sports industry (A1)**   ***Sport and recreation industry***  ***Geographical factors***  ***Socio-economic factors***  ***Season factors***   * **Careers and jobs in the sports industry (A2)**   ***Key pathways***  ***Sectors***  ***Local employers***  ***National employers***  ***Sources of information on careers in sport***  ***Types of employment (full time, part time, self- employment etc)***   * **Professional training routes, legislation, skills in the sports industry (A3)**   ***Career pathways (coaching, sports science, sports development etc.)***  ***Job descriptions***  ***Industry standards***  ***Safeguarding***  ***Sector specific legislation***  ***Qualifications and professional bodies***   * **Sources of continuing professional development (A4)**   ***Memberships of professional bodies***  ***Required updates to professional competences***  ***Career progression training***  ***Gaining knowledge and experience through cross sector opportunities*** | **6 x 100 minutes Theory**  **Unit 7- Practical Sports Performance**  **(A) National Governing Body Rules/ Laws in selected sports**  **A1**   * **Rules/ laws as regulated by the national or international governing body for individual or team sports.**   ***For example, Badminton World Federation, FIFA, IRB***   * **Competition rules and regulations**   ***Olympic games***  ***World Cup***  ***Leagues***  ***Knockout competitions***   * **Unwritten rules and/ or Etiquette for specific sports.**   ***Sportsmanship***  ***Welfare of competitors***  ***Ethics***   * **Situations where rule/laws have been applied both legally and illegally**   ***Gaining a fair and unfair advantage***  ***Winning in a competitive environment***   * **Regulations for sports under competition rules**   ***Players***  ***Participants***  ***Equipment***  ***Playing surface/area***  ***Health and safety***  ***Facilities***  ***Scoring system***  ***Spectators***  **6 x 50 minutes Practical**  **(B) Examine the skills, techniques and tactics required to perform in selected sports**   * **Technical demands required to perform in a sport (B1)**   ***Skills required in specific sports and the correct technique for the skills***  ***Skill to include:***  ***Continuous***  ***Serial***  ***Discrete***  ***Attacking***  ***Defensive***   * **Tactical demands applied in sports performance**   ***Defending and Attacking***  ***Decision making***  ***Communication***  ***Environmental conditions***  **(C) Develop skills, techniques and tactics for sporting activity in order to meet sports aims**   * **Safe and appropriate practical performance demonstration and participation**   ***Demonstrate isolated and conditional practices***  ***Isolated- skills and techniques demonstrated independently with no external forces or pressure.***  ***Conditional practices- small sided games/ conditioned rules e.g. 5 touches***  ***Competitive situations- full sided game, under NGB rules.***  ***Application of rules and regulations***  ***Effective use of skills, techniques and tactics***  **Sports focus this term-**  **Individual- Table tennis**  **Team- Basketball** |
| **Spring 2 – 6 weeks (15 hrs)** | **6x150 minutes Theory**  **Unit 3- Careers in the Sports Industry (Coursework based)**  **(B) Explore own skills using a skills audit to inform a career development action plan**   * **Personal skills audit and potential careers (B1)**   ***Interests and accomplishments***  ***Qualities***  ***Basic skills***  ***Experience***  ***Qualifications***  ***Generic employability's***  ***Specific technical skills***  ***Using SWOT***   * **Planning personal development towards a career in the sports industry (B2)**   ***Personal skills audit***  ***Identification of key time sclaes***  ***Training/ educational/ experiential aims***  ***Career guidance and support available***  ***Career development action plan***  ***Professional development activities***   * **Maintaining a personal portfolio/record of achievement and experience (B3)**   ***Educational certificate***  ***Sports-specific awards***  ***Sporting achievements***  ***Testimonials***  ***Press cuttings***  ***Work experience***  ***Volunteering***  ***CV’s targeting sports industry jobs*** | **6 x 50 minutes Theory**  **Unit 7- Practical Sports Performance**  **(A) National Governing Body Rules/ Laws in selected sports**   * **Roles and responsibilities of officials (A2)**   ***Key officials and their roles in a sports competition e.g. umpires, referees, tournament directors, judges, timekeepers etc.***  ***Responsibilities of the officials to include interpretation and application of the rules/ law, control of competitors, health and safety, fair play, use of technology, communication, fitness requirments, qualifications.***  **(D) Reflect on own practical performance using selected assessment methods**   * **Assessment methods to review the performance of the skills, techniques and tactics in selected sport (D1)**   **SWOT**  **Use of technology**  **Testing**  **Interviews**  **Subjective**  **Observations**  **Objective performance data**  **6 x 100 minutes Practical**  **(B) Examine the skills, techniques and tactics required to perform in selected sports**   * **Technical demands required to perform in a sport (B1)**   ***Skills required in specific sports and the correct technique for the skills***  ***Skill to include:***  ***Continuous***  ***Serial***  ***Discrete***  ***Attacking***  ***Defensive***   * **Tactical demands applied in sports performance**   ***Defending and Attacking***  ***Decision making***  ***Communication***  ***Environmental conditions***  **(C) Develop skills, techniques and tactics for sporting activity in order to meet sports aims**   * **Safe and appropriate practical performance demonstration and participation**   ***Demonstrate isolated and conditional practices***  ***Isolated- skills and techniques demonstrated independently with no external forces or pressure.***  ***Conditional practices- small sided games/ conditioned rules e.g. 5 touches***  ***Competitive situations- full sided game, under NGB rules.***  ***Application of rules and regulations***  ***Effective use of skills, techniques and tactics***  **Sports focus this term-**  **Individual- Badminton**  **Team- Football** |
| **Summer 1 – 6 weeks (15 hrs)** | **6x150 minutes Theory**  **Unit 3- Careers in the Sports Industry (Coursework based)**  **(C) Undertake a recruitment activity to demonstrate the processes that can lead to a successful job offer in a selected career pathway**   * **Job applications (C1)**   ***Job advertisements***  ***Job analysis***  ***Job description***  ***Person specification***  ***Application form***  ***Personal CV***  ***Letter of application***   * **Interviews and selected career pathways-specific skills (C2)**   ***Communication skills required for interviews***  ***Presentation skills***  ***Career pathway-specific technical knowledge/ skills displayed***  ***Interview feedback form***  ***Observation form***  ***Reviewing applications from peer group***  ***Submitting applications to peer group***  ***Demonstration of interviews*** | **6 x 50 minutes Theory**  **Unit 7- Practical Sports Performance**  **(D) Reflect on own practical performance using selected assessment methods**   * **Assessment methods to review the performance of the skills, techniques and tactics in selected sport (D1)**   **SWOT**  **Use of technology**  **Testing**  **Interviews**  **Subjective**  **Observations**  **Objective performance data**   * **Review performance in the selected sports (D2)**   ***Review strengths***  ***Areas of improvement***  ***Skills techniques***  ***Tactics***  ***Application of rules***  ***Effective decision making***   * **Developments to improve performance (D3)**   ***How can you improve your performance***  ***Aims and objectives***  ***Short- and long-term goals***  ***SMART***  ***Opportunities***  **6 x 100 minutes Practical**  **(B) Examine the skills, techniques and tactics required to perform in selected sports**   * **Technical demands required to perform in a sport (B1)**   ***Skills required in specific sports and the correct technique for the skills***  ***Skill to include:***  ***Continuous***  ***Serial***  ***Discrete***  ***Attacking***  ***Defensive***   * **Tactical demands applied in sports performance**   ***Defending and Attacking***  ***Decision making***  ***Communication***  ***Environmental conditions***  **(C) Develop skills, techniques and tactics for sporting activity in order to meet sports aims**   * **Safe and appropriate practical performance demonstration and participation**   ***Demonstrate isolated and conditional practices***  ***Isolated- skills and techniques demonstrated independently with no external forces or pressure.***  ***Conditional practices- small sided games/ conditioned rules e.g. 5 touches***  ***Competitive situations- full sided game, under NGB rules.***  ***Application of rules and regulations***  ***Effective use of skills, techniques and tactics***  **Sports focus this term-**  **Individual- Athletics**  **Team- Netball** |
| **Summer 1 – 6 weeks (15 hrs)** | **6x150 minutes Theory**  **Unit 3- Careers in the Sports Industry (Coursework based)**  **(D) Reflect on the recruitment and selection process and your individual performance**   * **Review and evaluation**   ***Role play activity***  ***Individual appraisal of different interview roles***  ***Review of communication***  ***Review of organisational ability***  ***Assessment of how the skills acquired support the development of employability skills***   * **Updated SWOT and action plan**   ***SWOT analysis***  ***Self-critique of events and documentation prepared and how it supported the activity***  ***Review of the process***  ***Action plan to highlight addressing of weaknesses*** | **6 x 100 minutes Theory**  **Unit 7- Practical Sports Performance**  **(D) Reflect on own practical performance using selected assessment methods**   * **Assessment methods to review the performance of the skills, techniques and tactics in selected sport (D1)**   **SWOT**  **Use of technology**  **Testing**  **Interviews**  **Subjective**  **Observations**  **Objective performance data**   * **Review performance in the selected sports (D2)**   ***Review strengths***  ***Areas of improvement***  ***Skills techniques***  ***Tactics***  ***Application of rules***  ***Effective decision making***   * **Developments to improve performance (D3)**   ***How can you improve your performance***  ***Aims and objectives***  ***Short- and long-term goals***  ***SMART***  ***Opportunities***  **6 x 50 minutes Practical**  **(B) Examine the skills, techniques and tactics required to perform in selected sports**   * **Technical demands required to perform in a sport (B1)**   ***Skills required in specific sports and the correct technique for the skills***  ***Skill to include:***  ***Continuous***  ***Serial***  ***Discrete***  ***Attacking***  ***Defensive***   * **Tactical demands applied in sports performance**   ***Defending and Attacking***  ***Decision making***  ***Communication***  ***Environmental conditions***  **(C) Develop skills, techniques and tactics for sporting activity in order to meet sports aims**   * **Safe and appropriate practical performance demonstration and participation**   ***Demonstrate isolated and conditional practices***  ***Isolated- skills and techniques demonstrated independently with no external forces or pressure.***  ***Conditional practices- small sided games/ conditioned rules e.g. 5 touches***  ***Competitive situations- full sided game, under NGB rules.***  ***Application of rules and regulations***  ***Effective use of skills, techniques and tactics***  **Sports focus this term-**  **Individual- Athletics**  **Team- Rounders/ cricket** |
| **Assessment** | **Unit 1- Anatomy and Physiology- externally examined in January (date TBC**)  **PC1**- 28th September Anatomy and Physiology past paper (skeletal and Muscular system)  **PC2-** 4th January Anatomy and Physiology (full past exam)  Unit 3- Coursework internally assessed (June) | **Unit 2- External exam in January (Date TBC)**  **PC1**- 28th September Fitness Training and Programming for Health, Sport and Wellbeing past paper and scenario (focus will be on positive and negative lifestyle choices)  **PC2**- 4th January (full past paper and scenario)  **Unit 7- practical performance footage for each students individual sport. Written coursework attached.**  **PC3-** First sports assessed Table Tennis and basketball  **Table Tennis Assessed Criteria**   * Forehand and backhand push (defensive) * Forehand, backhand Drive (Attacking) * Forehand and backspin topspin loop (attacking) * Top spin and back spin serve * Forehand and backhand spin (defensive) * Sidespin   Skills will be assessed in closed drills where they can demonstrate the technique of the shots. They will then also be assessed in drills set up with some pressure presented to them. Finally, they will be assessed in open game situations where they will be marked on their decision making, technique, effectiveness, attacking and defensive play. They will also be asked to umpire a game to demonstrate their knowledge on the rules of the game.  **Basketball Assessed Criteria**   * Dribbling * Chest pass * Shoulder pass * Set shot * Jump shot * Lay up * Formations and positioning * Screens   Skills will be assessed in closed drills where they can demonstrate the technique of the skills. They will then also be assessed in drills set up with some pressure presented to them. Finally, they will be assessed in open game situations where they will be marked on their decision making, technique, effectiveness, attacking and defensive play. They will also be asked to referee a game to demonstrate their knowledge on the rules of the game.  **PC4-** Assessed In Football and Badminton  **Football Assessed Criteria**   * Short pass * Long pass * Cross * Shot * Dribbling * Tackling * Goal keeping (if students position) * Positioning   Skills will be assessed in closed drills where they can demonstrate the technique of the skills. They will then also be assessed in drills set up with some pressure presented to them. Finally, they will be assessed in open game situations where they will be marked on their decision making, technique, effectiveness, attacking and defensive play. They will also be asked to referee a game to demonstrate their knowledge on the rules of the game.  **Badminton Assessed Criteria**   * Short serve * Long serve * Overhead clear * Underarm clear * Smash shot * Drop Shot * Drive   Skills will be assessed in closed drills where they can demonstrate the technique of the shots. They will then also be assessed in drills set up with some pressure presented to them. Finally, they will be assessed in open game situations where they will be marked on their decision making, technique, effectiveness, attacking and defensive play. They will also be asked to umpire a game to demonstrate their knowledge on the rules of the game.  Note- Dependent on the sporting strengths of the class this may change. |