Flying Start

Physical Education

Contents:

Introduction to the course: Specification 2016- Edexcel for the 2 year course.

Component 1: Scientific Principles:

Topic 1: Applied anatomy and physiology

Muscular skeletal system Cardio-respiratory system and cardiovascular Systems Neuro-muscular system Energy systems: fatigue and recovery

Topic 2: Exercise physiology and applied movement analysis

Diet and nutrition and their effect on physical activity and performance. Preparation and training methods in relation to maintaining and improving physical activity and performance. Injury prevention and the rehabilitation of injury Linear motion Angular motion Projectile motion Fluid mechanics

Component 2: Psychological and Social Principles of Physical Education

Topic 3: Skill acquisition Coach and performer

The classification and transfer of skills; learning theories, Practices, Guidance, Feedback, Memory models

Topic 4: Sport Psychology

Factors that can influence an individual in physical activities; Dynamics of a group/team and how they can influence the performance of an individual and/or team; Goal setting, Attribution theory, Confidence and self-efficacy Leadership

Topic 5: Sport and Society

The factors leading to the emergence and development of modern day sport; Globalisation of sport; Commercialisation of sport; Ethics and deviance in sport; The relationship between sport and the media; Development routes from talent identification through to elite performance; Participation and health of the nation

Component 3: Practical Performance

Perform a range of skills and techniques in physical activity. Make decisions, implement strategies, tactics and/or compositional ideas, and apply knowledge and understanding of rules and regulations while performing physical activity

Apply knowledge and understanding of theories, concepts, principles and methods to physical activity and performance.

Component 4: Performance Analysis and Performance Development

Performance Analysis - in either the role of player/performer or coach, learners will investigate two components of a physical activity (one physiological component and either a technical or a tactical component) in order to analyse and evaluate the effectiveness of their own performance. Learners will demonstrate knowledge and understanding of performance analysis in order to produce an evaluation to demonstrate strengths and weaknesses and areas for development of a performance.

Performance Development Programme (PDP)

The PDP is designed to lead on from the learner's Performance Analysis. The purpose of the PDP is to optimise the learner's performance in the role of a player/performer or coach.

Pre-Course Preparation: Over the summer

'Choose your favourite sport and explore it'

Physiological component:

- Your GCSE PEP would a good starting point/support for this.
- Analysing a physiological component of your sport – Look at preparation and training methods in relation to maintaining and improving physical activity and performance.
- Produce a literature review for the 3 most important physiological components of your sport
- Analyse appropriate fitness tests (2.2.2) Fitness tests: functional thresholds, lactate threshold/anaerobic threshold/maximum steady state, gas analysis, multi-stage fitness test, step tests, yo-yo test, Cooper minute run, Wingate test, maximum accumulated oxygen deficit (MAOD), RAST (repeat anaerobic sprint test), Cunningham and Faulkner, jump tests, Margaria-Kalaman, strength tests, agility tests, sprint tests < 100m. (2.2.3)
- Interpret, calculate and present data (tables and graphs) based on fitness test results.
- Analyse which component of fitness will help to enhance performance 2.2.5 Components of fitness: localised muscular endurance, vO2 max, anaerobic capacity, maximal strength, strength, power, speed, agility, coordination, reaction time, balance, flexibility, exercise economy, maximal and submaximal aerobic fitness.
- Explore which method of training is appropriate and why? (2.2.11) Methods of training and their appropriateness for different activities: interval, circuits, cross, continuous, fartlek, flexibility (static, ballistic and proprioceptive neuromuscular facilitation (PNF)), weights (free weights and machines), resistance (including pulleys, parachutes), assisted (including bungees, downhill), plyometrics, speed agility quickness (SAQ) and functional stability. Advantages and disadvantages of each method of training.

Technical component:

Analysing a technical component of your sport:

• Analyse data.

• Analyse 3 phases of one core skill (what is a core skill?*).

• Compare results with a higher level performer.

• Identify strengths and weaknesses and compare to an elite athlete.

*A core skill = passing, shooting etc.

Sport and Society component:

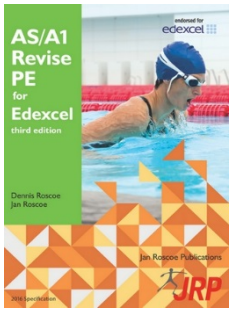
- Where and when did your sport begin?
- How did your sport begin?
- How did its popularity spread?

Book List:

Course textbook (recommended but not essential)

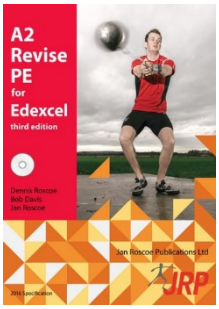
The text books are available electronically on the school *system (some students prefer to have their own copy)*

Year 1



Author: Dr. Dennis Roscoe & Jan Roscoe **ISBN:** 9781901424881
Publisher:Jan Roscoe Publications Format: Paperback **Price:** £17.84

Year 2



Author: Dennis Roscoe, Bob Davis, Jan Roscoe **ISBN:** 9781911241034
Publisher:Jan Roscoe Publications Format: Paperback **Price:** £17.84

Useful Text books : All available in school library - *arrange to take one out over the holidays?*

- Wesson, K., et al.(2005) Sport and PE: A Complete Guide to Advanced Level Study (Third Edition), London: Hodder Education
- Beashel, P. and Taylor, J. (1999) Advanced studies in Physical Education and Sport, Cheltenham: Nelson Thornes.
- Davis, R., et al. (2000) Physical Education and the Study of Sport, St. Louis, MO: Mosby
- Honeybourne, J., Hill, M. and Moors, H. (2004) Advanced Physical Education and Sport for A Level (Third Edition), Cheltenham: Nelson Thornes.

Useful websites :

Have a look at these websites :

http://www.brianmac.co.uk/index.htm

http://www.ptdirect.com/training-design

https://www.sportplan.net/drills/Netball/

http://www.topendsports.com

http://www.teachpe.com/

Introduction to anatomy and physiology- https://www.youtube.com/watch?v=uBGl2BujkPQ

www.bbc.co.uk/sport

you tube, then search any sporting topic

Tips

- Enjoy your break, “but beat the B of the bang”; this will get you on the front foot.
- Speak to present Year 12 PE students, transition from GCSE to A level is massive.
- An exciting, but challenging two years. You need to be prepared for some hard work, get yourself **organised** and you will have an enjoyable fantastic year.
- **Organisation** and managing your time is key. Purchase your lever arch file, dividers and start an organised filing system. Dividers titled as above for each of the 5 topics.
- Become a scholar of the subject; your wider reading will have a massive impact (BBC Sport website daily for a great overview).
- Learn muscles and their function.
- Analyse the science why people are successful in sport - physiologically and psychologically.
- Revisit your PE GCSE notes.
- Build resilience and determination over the holidays, workout your mind-set.
- Participate in and watch a wide variety of different sports and activities – analyse your own performance and that of others.