



Vyners School

Striving for
Excellence

Welcome to the PE Department



Sixth Form PE Staff:

- Mr Hall, Subject Leader
- Miss Powick, Deputy Subject Leader
- Mr Neville, Year 10 Leader
- Mr Flynn
- Miss Hawes, Year 8 Leader
- Mr Cawley, Deputy Year 11 Leader



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Our Key Stage 5 Curriculum

OCR

Oxford Cambridge and RSA

In the 6th Form we continue our broad offer of academic courses offering two courses for students to study.

Courses offered -

A Level PE

OCR Technicals in Sport and Physical Activity

It's been great to learn the science and psychology underpinning sport and has opened the door to a degree and career in sport!

- Year 13 Student



A-Level PE

“Our A Level in Physical Education develops knowledge, understanding and skills relevant to physical education. Students gain understanding of the scientific and socio-cultural factors that underpin physical activity, and demonstrate their ability as either performer or coach. This qualification is filled with a range of content across the sporting spectrum developing individuals knowledge in preparation for a possible career in teaching, sports medicine, nutrition, coaching, strength and conditioning to name a few.”

OCR

Oxford Cambridge and RSA

ENTRY REQUIREMENTS

2 x Grade 6+ in Science, 6+ in English, 6+ GCSE PE

COURSE CONTENT

Physiological factors affecting performance
Psychological factors affecting performance
Socio-cultural issues in physical activity and sport
Performance in Physical Education

ASSESSMENT

Written exams - set and marked by OCR (4 unit exams)
Physiological factors affecting performance— 2 Hour Exam
Psychological factors affecting performance— 1 Hour
Socio-cultural issues in physical activity and sport—1 Hour Exam
Performance in Sport - Practically Assessed

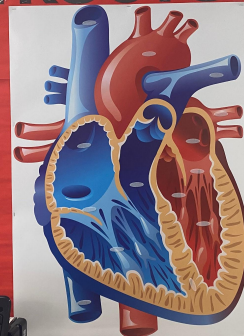


PE PERIODIC TABLE

| | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|
| Mo | | | | Co | | | Sk | Cr | | |
| Ab | | | Mu | Cf | St | SM | SC | Cv | Tv | Sc |
| Ad | Pi | Bi | Tr | Me | Fl | Te | Fp | Lv | Sc | H |
| Ro | Lu | A | Qu | Ag | Po | R | Se | Ri | Cl | Fe |
| B | Ss | Ha | G | L | U | Ra | Co | L | Ra | Co |
| Sq | J | F | EX | Co | | | T | Fi | | Tm |



HEART STRUCTURE



- Superior Vena Cava
- Aorta
- Left Ventricle
- Inferior Vena Cava
- Pulmonary Vein
- Right Atrium
- Bicuspid Valve
- Tricuspid Valve
- Left Atrium
- Pulmonary Valve
- Aortic Valve
- Septum
- Right Ventricle
- Pulmonary Artery

Monday 20th September
Lecture: Synthesis

Endurance: The period around that the heart rate stays high.

Intensity: The force that is applied to the heart system by weight of the person.

Resistance: A force that the heart must work against.

Effort: The force that is applied by the user of the heart system.

ELF: Effort, Load, Force

Example: A person who is a sprinter will have a high heart rate and a high heart rate.

Example: A person who is a long distance runner will have a lower heart rate and a lower heart rate.

Example: A person who is a weightlifter will have a high heart rate and a high heart rate.

Example: A person who is a swimmer will have a lower heart rate and a lower heart rate.

Example: A person who is a cyclist will have a lower heart rate and a lower heart rate.

Long term effects of Physical Activity on Human Circulatory System

Increased bone density:

- weight bearing exercise puts bones under stress
- in response the body produces more cells that build new bone
- to prevent osteoporosis
- to make bones stronger / denser

Increased strength of ligaments and tendons:

- weight bearing exercise increases strength of ligaments and tendons
- to reduce the risk of injury to these ligaments and tendons

Muscle hypertrophy:

- strength training increases muscle size
- also increases strength of muscles
- muscular endurance - low weight / high reps
- muscular strength - high weight / low reps
- best for adaptation response
- to the body reacts to training loads imposed on it by increasing its ability to cope with loads
- adaptations occur during the recovery period after the training session is complete

Capillary angiogenesis:

- heart - back - lungs
- decrease volume of blood in lower body
- decrease intensity
- after open air - regular hand into running returns
- decrease volume of blood returns
- heart becomes more efficient returning oxygen to amount of blood pumped by heart per beat
- to reduce oxygen delivery
- heart volume / more efficient moving more blood per minute
- size and strength of heart
- chamber increase in volume
- more oxygenated blood can be pumped by heart
- increasing oxygen supply to working muscles

Heart:

- cardiovascular response
- to training increases the number of capillaries in heart
- increases oxygenated blood from arteries to tissue
- increases oxygenated blood from tissue back to heart
- helps make blood vessels more elastic - flexible - adjust
- increases number of red blood cells
- also a resting blood pressure
- regulate oxygen return to the veins
- and volume becomes more elastic
- the heart does not need to pump with as effort - this reduces force on arteries - lowers

Heart Structure:

- superior vena cava
- aorta
- left ventricle
- inferior vena cava
- pulmonary vein
- right atrium
- bicuspid valve
- tricuspid valve
- left atrium
- pulmonary valve
- aortic valve
- septum
- right ventricle
- pulmonary artery

Heart Function:

- contractility
- relaxability
- compliance
- elasticity
- contractility
- relaxability
- compliance
- elasticity
- contractility
- relaxability
- compliance
- elasticity



Sports Studies

OCR

Oxford Cambridge and RSA

COURSE AIM

A level 3 qualification for post - 16 learners who want to achieve their potential and progress to the next stage of their lives whether it be in higher education, an apprenticeship or employment. It aims to develop students' knowledge, understanding and skills of the principles of sport and physical activity to a wide range of participants.

CONTENT

- Body Systems and the Effects of Physical Activity
- Sports Coaching and Activity Leadership
- Sports Organisation and Development
- Working Safely in Sport, Exercise, Health and Leisure
- Organisation of Sports Events
- Physical Activity for Specific Groups
- Sports Injuries and Rehabilitation
- Practical Skills in Sport and Physical Activities
- Performance Analysis in Sport and Exercise
- Nutrition and Diet in Sport and Exercise
- Health and Fitness Testing for Sport and Exercise
- The Business of Sport
- Sport and Exercise Psychology
- Sport and Exercise Sociology

ENTRY REQUIREMENTS

Two Grade 4 in Combined Science and Grade 4 in English

Two Grade 4 in Triple Science and Grade 4 in English

COURSE BALANCE

3 x External Examinations

8 x Coursework based Units



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Our Co-curricular Offer

Students are invited to join a wide range of activities there is something for everyone:

Trampolining, football, rugby, netball, basketball, badminton, table tennis, gymnastics, hockey, cross country are just a few of the activities we offer!

Past trips have included:

Paris Netball tour, Canada Rugby tour, Austria Ski trip, Valkenberg Football tour





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Questions

Please email Mr Hall - thall@vynersschool.org.uk with any questions you have.

Please refer to your 6th form brochure for entry requirements and course content.



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**We look forward to meeting you in
September 2024!**