CITY AND ISLINGTON COLLEGE

PHYSICAL EDUCATION
A LEVEL

SUMMER ASSIGNMENT:

The following tasks will help you revise key KS4 knowledge that you will continue to need and introduce you to the new topics within KS5. Please complete the booklet, filling in the table at the end and getting it signed off by someone at home who has seen you complete the work (note down the date and time).

Please complete all the activities in preparation for September

The pupils who achieve well at A Level are those who can study independently and give their time to revising and learning at home. The completion of these tasks will be a good indicator, for both of us, of the work needed when the course starts. I excitedly wait to see the fantastic work you produce.

Have a lovely summer holiday and see you in September.

Task 1

Applied Anatomy and Physiology, and Biomechanics

These areas will look at understanding how the body is put together, and how the different processes in it work. We will look at everything from the heart to the brain and the energy systems, (preventing) different types of injuries, and how we train, eat, and supplement to improve sporting performance.

This is the module for anyone wishing to become a physiotherapist, nutritionist, or performance analyst.

Activity 1: Please put together a 3–5 minute presentation on the following topics to a sport/ sportsperson of your choice.

- Diet
- Energy systems used
- Analysis of movement for specific skill in the sport (muscles & bones used, planes & axes)
- Transportation of O_2 and the removal of CO_2
- Use of proprioceptors, baroreceptors, and chemoreceptors

The majority of these topics you have already covered in GCSE, but you will need to do some research.

You will present these in the first week and be assessed on the knowledge included and your ability to apply it to your chosen sport.

Activity 2: Use Google Scholar (scholar.google.com) to research one of the topics below. You should read 3–4 articles and summarise your findings. If possible, apply this information to a sport of your choice. You will need to provide a bibliography of the documents you have read at the end (names of the authors. Title of the document).

- Analysis of movement in sport
- Energy systems in sport
- Effects of lactic acid in sport
- Gaseous exchange during sport

Task 2

Skill Acquisition and Sport Psychology

These areas will look at how an athlete's mental well-being and psychological state affect their performance. As well as how we, as coaches, can provide the best support to our athletes to improve their performance. We will look at the effect of arousal, motivation, and confidence on performance, the benefits of goal setting, how we process and store information, and theories of learning.

This is the module for anyone wishing to become a sports coach, Physical Education teacher or sport psychologist.

Activity 1: Define the following terms:

- Skill
- Simple – Complex skill
- Open – Closed skill
- Fine – Gross movement
- Externally-paced – Internally-paced skill
- Discrete – Serial – Continuous skill
- Low Organisation – High Organisation skill

For each continuum, you must provide two examples:

one for each side. Remember they are a continuum, so your example might not be right at the end.

Activity 2: Define the following key terms:

- Confidence
- Self-efficacy
- Attitude
- Motivation
- Arousal
- Anxiety

For each, explain how having a high/low level (or positive/negative attitude) would affect an athlete's performance level.

Activity 3: Research the following terms:

- Positive transfer
- Negative transfer
- Bilateral transfer
- Zero transfer

When completing your research, include the following information:

- An explanation for each of the different processes.
- A sporting example (of your choice) for each type of transfer.
- A suggestion of how a coach/teacher could use this information to develop their athlete's skill and ability levels.

Task 2

Sport and Society (and the Role of Technology)

These areas will look at how sport has developed through the past 200 years: from the pre-industrial ages of 1700s Britain to the continued technological advancements within sport today. These areas will also see us tackle hard-hitting debates about the equality (or lack of) within sport and the use of drugs and acceptance of violence in sport. We will look at the history and development of football, tennis and athletics, the effect of commercialisation in sport, sociological debates in modern-day sport, and the future of technology in sport.

This is the module for anyone wishing to become a sports journalist, sports historian, or sports policymaker.

Activity 1: Read a newspaper/web article on one of the following topics

- Racism in sport
- Sexism in sport
- Drug use in elite sport
- Stereotyping in adolescent sport
- Financial inequality in sport

Summarise the article in no more than 10 points.

Suggest three ways this issue could be tackled.

Activity 2: Listen to one of the episodes of the Good Sport (with Jody Avirgan) podcast listed below. Summarise the argument presented in the episode. Provide one for and one against statement for this argument.

- Something in the Water: Where Do Great Athletes Come From?
- Pardon the Interruption … But Did Sports Debate Shows Change the World?
- The Hidden World of Stadium Deals
- How to Make a Fan: From F1 to Banana Ball
- The Past and Future of Gender in Sport

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Activity	Time/Date	Signed

Physical Education Activity Log

Task 3

Essential Physical Education Terminology Grid

Use this grid to guide your revision during the summer. Tick or cross the first three boxes after your GCSE exams to indicate what topics you are comfortable with, then fill in the last three boxes at the end of the summer to see the progress you have made. This is not a complete list of key A Level terminology, but it will cover the basics when the course begins.

	After GCSE I knew:			At the end of the summer, I know:		
Key term	**Definitions**	**Examples**	**How to apply appropriately**	**Definitions**	**Examples**	**How to apply appropriately**
Altitude training						
Anticipatory rise						
Antagonistic pairs						
Aterio-venous oxygen difference (A-VO_2 diff)						
Axis						
Cardiac conduction system						
Excess post-exercise oxygen consumption (EPOC)						
Indirect calorimetry						
Lactate threshold						
Oxygen deficit						
Planes						
Receptors						
Respiratory exchange ratio (RER)						
VO_2 Max						
Chronic injury						
High intensity interval training (HIIT)						
Lever						
Objective data						
Subjective Data						
Reliability						
Validity						
Quantitative data						
Qualitative data						
Anticipation						
Reaction time						
Social learning						
Transfer of learning						
Aggression						
Anxiety						
Arousal						
Cohesion						
Cognitive dissonance						
Learned helplessness						
Self-confidence						
SMARTER acronym						
Social facilitation						
Golden Triangle						
Gamesmanship						
Sportsmanship						
Deviance						