

SEMINAR 4 SPORTS SCIENCE

Task 1 Draw an affinity map of sports science with all the sub-disciplines and related fields of study.

Task 2 Tenses

Change the form of the verbs given in brackets to fit each gap.

Sport science is a discipline that _____ (study) the application of treatment and prevention of injuries related to sports medicine. The study of sport science traditionally incorporates areas of physiology, psychology, and biomechanics but also includes other topics such as nutrition.

Sport scientists and performance consultants _____ (grow) in demand and employment numbers, with the ever-increasing focus within the sporting world on achieving the best results possible. Through the study of science and sport, researchers _____ (develop) a greater understanding of how the human body reacts to exercise, training, different environments and many other stimuli.

Sport science can trace its origins to ancient Greece. The ancient Greek physician Galen (131–201) _____ (write) 87 detailed essays about improving health - proper nutrition, aerobic fitness, and strengthening muscles.

New ideas upon the working and functioning of the human body _____ (emerge) during the renaissance as anatomists and physicians challenged the previously known theories. These spread with the implementation of the printed word, the result of Gutenberg's printing press in the 15th century. Allied with this was a large increase in academia in general, universities _____ (form) all around the world. Importantly these new scholars went beyond the simplistic notions of the early Greek physicians, and shed light upon the complexities of the circulatory, and digestive systems. Furthermore by the middle of the 19th century early medical schools (such as the Harvard Medical School, formed 1782) _____ (begin) appearing in the United States, whose graduates went on to assume positions of importance in academia and allied medical research. (wikipedia.org)

Task 3 Speaking

Read the titles of scientific articles below. What disciplines do they belong to? Which of them would you like to read?

- 1) Effects of an extreme endurance race on energy balance and body composition – a case study
- 2) Participation, motivation and student's physical activity among sport students in three countries.
- 3) Aging of running shoes and its effect on the mechanical and biomechanical variables
- 4) Psychological skills usage and the competitive anxiety response as a function of skill level in rugby union
- 5) Using sports against the Italian Mafia: Policies and challenges on the path of cultural renewal

Task 4 Vocabulary

Read the tasks students have been given. Identify the key verbs commonly used in academic English.

A) Discuss some of the problems involved in investigating attitudes to diet and health. Write a critical review of an investigation you have read about, or describe an investigation you yourself could conduct. Consider the advantages or disadvantages of different methods.

B) Starting from rest, an aircraft accelerates to its take-off speed of 60m/s in a distance of 900m. Illustrate this with a velocity-time graph. Assuming constant acceleration, find how long the take-off run lasts.

C) The fact that nations agree to follow international law demonstrates that we can identify ideals that are trans-national and trans-cultural. How far is this statement true? Critically analyse any recent event which supports or challenges the statement.

D) Examine how industrial growth has affected any two developing countries. Provide statistical evidence where necessary and include a discussion of likely future trends.

In academic style, noun phrases can often be used instead of some of the key verbs.

Complete each phrase with the appropriate noun. Use a dictionary if necessary.

1. investigate = conduct, carry out an _____ into/of
2. illustrate = provide an _____ of
3. analyse = provide, carry out an _____ of
4. affect = have an _____ on
5. attempt = make an _____ to/at
6. classify = make, provide a _____ of

Task 5 Writing up research: the Abstract

An abstract (sometimes referred to as a synopsis) is a brief summary of a thesis or journal article. It typically includes some or all of the following elements. What is their most likely order?

Purpose Conclusion Results Introduction Methods

Complete the abstract below with the given phrases:

analysis also demonstrated *purpose of this work was to*
results showed *these results it may be stated*
was conducted *a significant role*

The _____ (1) determine if public communication of science and technology (PCST) has any influence on people's decision to become dedicated to scientific research.

For this reason, a national survey involving 852 researchers from all disciplines _____ (2) in Argentina.

The _____ (3) that the factors affecting scientific vocation are many, and that, regardless of differences in gender, age or discipline, the greatest influence on the decision to go into scientific research is exerted by teachers. The _____ (4) that different manifestations of PCST (science books, press articles and activities such as visits to science museums) play _____ (5) in awakening the vocation for science.

From _____ (6) that PCST – in addition to its function of informing and forming citizens – exerts a significant influence in fostering scientific vocation.

Match the parts of an abstract from above with the individual paragraphs of this abstract.

(Hewings, M; Thaine, C. *Cambridge Academic English Advanced*. CUP, 2012)