Introduction to Sport, Health and Exercise Sciences



We're delighted you're thinking about studying at Brunel University London.

Our lecturers have put together the following information to help you prepare for your course. This will give you a snapshot of the materials and reading list you'll be using. You'll get a full breakdown of information before you enrol.

On our website you can also find out more about your modules and chat to a current student.

If you have any more questions, please get in touch.

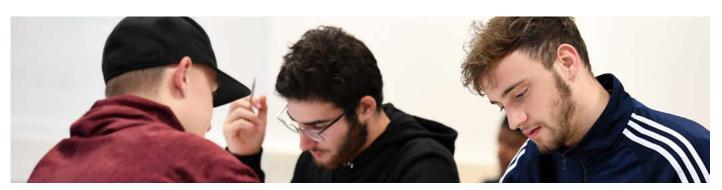
We look forward to welcoming you to Brunel.

Sample lecture/coursework questions

- What is sport pedagogy? Armour (2011). Chapter 1
- Learning Theories in PE and Youth Sport. Armour (2011). Chapter 3
- Why do people participate in sport? Coakley and Pike (2009/14). Chapter 2
- What is research? Jones and Gratton (2015). Chapter 1
- Research traditions. Jones and Gratton (2015). Chapter 2
- Cardiovascular System: The Heart. VanPutte et al., (2020). Chapter 20
- Nutrition, Metabolism, and Temperature Regulation. VanPutte et al., (2020). Chapter 25
- Welcome to Sport and Exercise Psychology. Weinberg and Gould (2018). Chapter 1
- Arousal, Stress and Anxiety. Weinberg and Gould (2018). Chapter 4

Practice questions

- What are the differences between constructivist and behaviourist pedagogies in physical education and youth sport?
- Describe the cardiac cycle and the relationship among the contraction of each of the chambers, the opening and closing of valves, the pressure in each of the chambers, the phases of the electrocardiogram, and the heart sounds.
- Describe the different aerobic metabolic processes which take place to synthesise ATP for movement using one molecule of glucose.
- What were the most significant factors that influenced the choice you made in participating in sport? When listing the influential factors, try to put them into different categories (e.g. social, cultural, economic, etc).
- Provide a summary of the differences between quantitative and qualitative research methods, along with examples of when each should be used.
- How and why does arousal and anxiety-related emotions affect sport performance?



Reading list

- Armour, K. (2011). Sport Pedagogy: An introduction for teaching and coaching. London, UK: Pearson.
- Coakley, J & Pike, E. (2009/14). Sport in Society: Issues and Controversies. Boston; McGraw-Hill
- Jones, I. & Gratton, C. (2015). Research Methods for Sports Studies (3rd ed.). Routledge: London, UK.
- VanPutte, C. L., Regan, J. L., Russo, A. F., Seeley, R. R., Stephens, T. D., & Tate, P. (2020). Seeley's anatomy & physiology (12th Edition). New York, NY: McGraw-Hill Education.
- Weinberg, R. S., & Gould, D. (2018). Foundations of sport and exercise psychology. Human Kinetics.
- The Physiological Society
- <u>The Gatorade Sport Science Institute</u>, particularly <u>this article</u> on hydration
- Brunel article outlining how athletes can prepare for the expected heat and humidity at the Tokyo Olympic Games
- Playing with Research in Health and Physical Education
- Physical Activity Researcher podcast
- Government physical activity guidelines: infographics
- <u>Creating peak performance using music with Dr Costas Karageorghis</u>
- <u>Beat the press podcast</u>: Seeing how footballers and the people around them deal with pressure on and off the pitch with Dr Misia Gervis

