



ESPORTS HEALTH  
AND  
PERFORMANCE INSTITUTE

# ESPORTS HEALTH AND PERFORMANCE: FOUNDATIONS

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# LIVE COURSE INFO

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This course is designed for individuals interested in learning about the rapidly-growing esports and video gaming industries, as well as the roles available to health and performance professionals in this field. The introductory live course will cover

- Understanding the performance and health landscape in esports
- Principles of posture and ergonomics
- Esports technique
- Common injuries and performance considerations
- Current research

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## **Course Objectives:**

- Describe the current state of health and performance infrastructure in esports
- Identify current opportunities and barriers for physical therapists in this field
- Explain the impact of different types of peripheral devices and game mechanics on biomechanics
- Identify common injuries and misconceptions about injuries in esports

Course time: 6 hours

# OUTLINE



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## **Module 1: Understanding the Health and Performance Landscape**

1. **Overview of the current state of health and performance**
  - a. **Introduction to esports and video gaming**
  - b. **Esports athlete culture**
  - c. **Current research**
2. **Role of health professionals in esports**
3. **Overview of the physical demands of esports**
  - a. **Biomechanical assessment**
4. **Current issues in esports**
  - a. **Endemic and nonendemic limitations**
  - b. **Infrastructure and healthcare resources**

## **Module 2: Posture and Ergonomics**

1. **Posture and Ergonomics Basics**
  - a. **Body position**
  - b. **Impact of peripherals and platform type**
2. **Postural Assessment**
  - a. **Use of a postural assessment tool**
  - b. **Quantitative vs qualitative assessment of posture**
3. **Common Postural Faults**
4. **How to Teach Posture to Gamers**

## **Module 3: Esports Technique**

1. **Relevant Anatomy and Pathophysiology**
2. **Peripherals and Input Devices**
  - a. **Impact of devices on pathophysiology**
3. **Esports Technique**
  - a. **Mechanical skills/biomechanics**
  - b. **Theories of motor learning**
4. **Outcome Measures and Assessment Tools**
5. **Case Studies**

## **Module 4: Common Injuries**

1. **Upper Extremity: Hand and Wrist**
2. **Upper Extremity: Elbow and Shoulder**
3. **Neck and back**

# PRESENTERS

**Dr. Caitlin McGee, PT, DPT, MS** received her undergraduate degree in Neuroscience and Exercise and Sport Science from Ursinus College and her Doctorate of Physical Therapy from the University of Delaware. She has been working in esports and orthopedic medicine since 2015. She is an editor of the Handbook of Esports Medicine, the first clinical textbook for the field of esports health and performance, serves as an associate editor for the Annals of Esports research, and has published research on the topic of tendinopathies in esports.

**Dr. Matthew Hwu, PT, DPT, OCS, CSCS** received his Doctorate in Physical Therapy from Western University of Health Sciences and completed an Orthopedic Physical Therapy residency program through Kaiser Permanente, Southern California. He has been working in esports since 2015 and is currently the Head of Esports Medicine and Performance at KSE Esports where has developed systems and structures to support the health and performance of the players.

**Dr. Elliot Smithson PT, DPT, MS, ATC, EMT** received his undergraduate degree from University of Central Florida in Athletic Training, his Masters from Marshall University in Athletic Training, and his doctorate in Physical Therapy from University of St. Augustine for Health Sciences. He has been working in sports and entertainment medicine since 2013 and transitioned into esports medicine in 2019.

**Dr. Kevin Ho, PT, PhD**, is an Associate Lecturer in the Discipline of Physiotherapy at the School of Health Sciences. He completed his PhD about the relationship between sleep and musculoskeletal pain in 2020 at the University of Sydney. His current research investigates the prevalence and management of musculoskeletal injuries in esports.

**Dr. Jonathan Chung, B.Sc. Hons., DC, NASM-CPT**, received his undergraduate degree with a Major in Life Sciences and a Minor in Economics from Queen's University in Kingston and his Doctor of Chiropractic from Canadian Memorial Chiropractic College. He has been a chiropractor since 2019.