

Neuromuscular Profiling & Assessment Course

Course Instructor: Matt Jordan, PhD, CSCS



Course Description:

Learn how to pinpoint neuromuscular deficits that can't be seen with the coaching eye. Dr. Matt Jordan, PhD, CSCS (Director of Sport Science at the Canadian Sport Institute Calgary) will teach workshop attendees how to integrate EMG, motion capture, and force plate methodology to develop protocols for asymmetry testing, return to sport neuromuscular profiling, and neuromuscular monitoring. Dr. Jordan will work through case studies to solidify the link between knowledge and practice. He will also speak to current trends and share best practices based on scientific research. You will leave the two-day course with an understanding on how to integrate neuromuscular assessments into a cohesive athlete monitoring framework.

Course Attendees Will Learn:

- Why vertical jumping abilities should be monitored for athletic populations.
- How to set up a recording process that ensures quality data collection; including equipment, calibration, and maintenance basics.
- How to employ dual force plate methodology to monitor and evaluate functional force asymmetries, neuromuscular readiness, and neuromuscular performance for athletes.
- How to combine force (kinetics), video (kinematic), and muscle (electromyography) assessment to evaluate neuromuscular function.
- How to integrate neuromuscular testing into a cohesive training program for non-injured and injured athletes

Day 1 Schedule:

8:30am to 9:00am	Registration Check-in Available
9:00am to 10:15am	Seminar 1: Introduction to Neuromuscular Assessments, Force Asymmetry Testing, and Why Measuring What Matters, Matters
10:15am to 10:30am	Coffee Break
10:30am to 12:00pm	Seminar 2, Part 1: Force Asymmetry Testing: Force Plate Methodology, Assessing Neuromuscular Abilities
12:00pm to 1:00pm	Lunch
1:00pm to 3:00pm	Applied practice session: Force time curve analyses
3:00pm to 3:15pm	Coffee Break
3:15pm to 4:30pm	Seminar 2, Part 2: Force Asymmetry Testing: Monitoring Neuromuscular Readiness and Fatigue

Day 2 Schedule:

9:00am to 10:15am:	Seminar 3: Surface Electromyography and Assessing Intermuscular/Intermuscular Coordination
10:15am to 10:30am:	Coffee Break
10:30am to 12:00pm:	Applied practice session: Adding in EMG analyses
12:00pm to 1:00pm:	Lunch
1:00pm to 2:15pm:	Seminar 3 (cont.): Surface Electromyography and Assessing Intermuscular/Intermuscular Coordination
2:15pm to 2:30pm:	Coffee Break
2:30pm to 3:30pm:	Building a Neuromuscular Monitoring Program