

DC4K Online Bundle A Series Schedule

Module One: Part One (2 hours)

- 15 min: Orientation to course structure, introduction, course overview
- 15 min: Conceptual introduction to a neuromuscular, dynamic approach to central stability with a focus on the diaphragm as the link between multiple systems that influence postural control.
- 30 min: Evidence and theory for framework for discussion of a functional definition of the core: Teamwork (diaphragm, TA, pelvic floor), alignment (optimizing availability) and preparation (anticipatory control), definition of core strategy
- 15 min: Postural control research in CP, DCD and ASD
- 15 min: Multi-systems discussion of typical motor development birth to 24 months with focus on alignment and development of inner core team and outer core postural synergists
- 15 min: Multi-systems discussion of atypical motor development addressing alignment disruptions beginning at birth and immediate and long term compensations for decreased central stability against gravity, implications of these compensations for motor function, video analysis demonstrating compensations in pediatric clients, clinical questions and answers
- 15 min: Interdependence of core stability and sensory processing, impact of vestibular system on development of core stability, clinical questions and answers

Module Two: Alignment (approx. 1.5 hours)

- 15 min: Alignment as access to optimized muscular recruitment, multiple systems and inputs to the brain
- 15 min: Re-framing an understanding of Upper Quarter and Lower Quarter contribution to alignment (ribcage/pelvis) vs. lumbo/pelvic position only, contribution of rib cage position to alignment in clinical presentation, new definition of alignment presentation
- 30 min: Demonstration via lecture and video of detailed alignment screen and application to pediatric clients and discussion of range of neutral alignment, alignment self-lab instructions
- 30 min: Demonstration of optimized alignment, clinical insights in pediatric clients, instructions for alignment self-corrections lab

Module Three: Diaphragm (approx. 1 hour)

- 15 min: Anatomical and functional review of the Diaphragm and breath mechanics, dysfunctional dominance patterns: chest, belly and breath holding
- 15 min: Breath mechanics intervention strategies: cueing a balanced breath in children
- 15 min: Dysfunctional dominance patterns: intervention strategies
- 15 min: Video demonstration/analysis of impact of intervention strategies on breath pattern in pediatric clients, clinical questions/answers, breath mechanics self-lab instructions

Module Four: Pelvic Floor/TA (approx. 2.0 hours)

- 15 min: Anatomical and functional review of pelvic floor and functional partnerships,
- 15 min: Pelvic floor access; clinical tricks/cues in standing
- 30 min: External pelvic floor assessment: palpation, self-palpation and functional movement/test interpretation, application in pediatric clients, pelvic floor self-lab instructions
- 15 min: Addressing pelvic floor in pediatrics, noting the difference between treatment of functional movement vs. continence specifically, pelvic floor intervention strategies in pediatrics via connecting the components of the inner core team
- 30 min: TA anatomical review as it relates to Piston relationships and TA self-lab, clinical questions and answers
- 15 min: Module synthesis via clinical problem solving through analysis of pictures and videos, clinical questions and answers

Module Five: Posterior Oblique Synergist (approx. 2.25 hours)

- 15 min: Clinical questions and answers, conceptual review with mini-case presentation
- 15 min: Assessment of seated posture, seated posture self-lab instructions
- 15 min: Compare and contrast the "anticipatory core" with the "reactive core" synergists, relationship to development of postural control, integration of alignment, central stability and recruitment order into movement
- 15 min: Introduction of Posterior Oblique Synergist (POS) anatomy, relationship to core stability team and functional movement
- 60 min: Posterior Oblique Synergist exercise lab demonstration and self-lab instructions
- 15 min: Video demonstrations of adaptations to POS exercises for children with motor challenges

Module Six: Anterior Oblique Synergist/Lateral Synergist (approx. 1.75 hours)

- 45 min: Introduction of Anterior Oblique Synergist anatomy, relationship to core stability team and functional movement, Anterior Oblique Synergist exercise lab demonstration, Anterior Oblique Synergist self-lab instructions,
- 15 min: Video demonstrations of adaptations to AOS exercises for children with motor challenges; clinical questions and answers
- 30 min: Introduction to Lateral Synergist anatomy, relationship to core stability team and functional movement, Lateral Synergist exercise lab demonstration, Lateral Synergist self-lab instructions, video demonstration of adaptations to LS exercises a child with motor and sensory challenges
- 15 min: Pulling it all together: exercise lab demonstration for treatment addressing recruitment of inner core stability and multiple postural synergists, Pulling it all together self-lab instructions, clinical questions and answers

Module Seven: Case Studies (approx. 1.75 hours)

- 30 min: Case study for child with CP Hemiplegia, child with Hydrocephalus,
- 45 min: Clinical group problem solving exercise for a child with High Functioning Autism: Building a treatment program progression
- 30 min: Conceptual review of DC4K alternative neuromuscular model of core stability, clinical questions and answers across multiple clinical populations

