

(On own time and pre-requisite to course)

Movement With A Brain Foundational Neurobiology

Need to Know Neuroanatomy and Theory Part 1 & 2

Adult Learning & Neuroplasticity

Anatomy of a Neuron and Neuroplasticity

Must Know Terms: Nervous System

Directed, intentional, adaptive neuroplasticity: what it means and how to achieve it (Dr.

Huberman lecture/interview excerpts)

Resources: Book list, neuroanatomy terms and web links

LIVE (with video and slides you keep and study at own pace)

Live Week 1 **Tackling Business Topics (we will continue to touch upon these topics throughout the course)

Refine: Identifying core values as it relates to life and business

Identifying ideal student/client/class

Explain: How to teach new approaches and strategies for introducing new content

Titrate: How much, when and where to offer new material

Live Week 2 & 3 **Foundations of teaching movement: Cue

Internal cueing: verbal

external: verbal and visual

visual imagery cueing

proprioceptive cueing

relevant teaching theory: Ecological and environmental psychology

Live Week 4 **Foundational Skills: Fuel

The nose knows: benefits of nasal breathing

Diaphragm and Phrenic Nerve

Need to know terms: Bohr Effect, Co2 tolerance, Hypocapnia

Buteyko, Wim Hoff and other methods

Integrating: ideas for resistance breathing and increasing Co2 tolerance

Integration: Ladder Breathing (coordinating movement with breath beyond vinyasa)

Banded breath, crocodile breath and lateral rib expansion

Live Week 5 **Nervous System: Architecture

Cranial Nerves

practical application: movement for each cranial nerve such as eye and tongue movement

Spinal Nerves

Move/innervate: neural flossing/mobilization and ELDOA

Live Week 6 & 7 **Foundational Skills: Balance

Theory/Assessment: Rhombegs, Fukuda Step, Single stance and Gait

VOR, VORc, Opposed gaze

Feet First, slide show from my live course

How/where to embed/integrate into classes

Live Week 8 & 9 **Foundational Skills: Coordinate

Theory/Assessment: RAPS, foot tap, finger to nose etc

Infinity Walk (also good for VOR and neck mobility)

Coordination Charts

Burdenko Land (dual tasking)

Stroop Effect (Dual tasking and Cognitive Load)

More in depth cerebellum

Live Week 10 **Foundational Skills: See

Theory/assessment: two visual pathways, visual field test, convergence test

Vergence/Accommodation

Saccades/Pursuits

Gaze Stabilization

Foveal vs Panoramic vision and implications for posture and stress reduction

Live Week 11 & 12 **Foundational Skills: Clarify

Cortical maps and how they degrade and improve

Mapping the Shoulder, spine, pelvis (as examples)

Cueing with light: Laser mobility

Clarifying with sensation: using hands, kinesiotape and topical information for better movement

Arthrokinetic reflex/joint mobilization

Contraction/relaxation maps for improved cortical maps

Week 13 **Gait, posture and reflexes: Affecting Involuntary movement

Cerebellum more in depth

Basal Ganglia

Circuits of movement

PMRF and brain stem

Eye position reflexes

Week 14 **Integration: Stacking, combining and implementing

Neck isometrics with tongue/jaw/eyes

Head positions for SSC with compass lunge and knee mobility

Head isometrics for shoulders

Neuro-informed vinyasa

Beyond Drishti

Additional resources:

Intake Form

Simple Tools for Reset

