

COURSE DESCRIPTION

The CNS® Certification Course is a 30-hour continuing education course that includes 20 hours of online (self-study) content and 10 hours of lab (in-person).

It covers evidence-based interventions for the stroke and brain injury populations. Participants will receive hands-on education on treating multiple systems, including the physical, cognitive, perceptual, psychosocial, and environmental systems.

LEARNING OBJECTIVES

At the end of this course, participants will be able to:

- Evaluate the clinical presentation and pathophysiology of upper motor neuron conditions using standardized assessments.
- Develop best-practice intervention strategies across various systems: motor, sensation, cognition, language, psychosocial, and environment.
- Integrate remedial and compensatory strategies to improve functional, biomechanical, and neurological outcomes.
- Design comprehensive treatment plans that utilize innovative technologies and devices in clinical practice.

PROGRAM CONTENT

Participants will engage in a variety of interactive and hands-on workshops. Topics include the following:

- Neurological Foundations
- Evaluation Tools, Clinical Measures, Imaging
- The Physical System: Motor Control, Movement
- The Perceptual System: Sensation, Vision, Communication
- The Cognitive System: Attention, Memory, Executive Functions
- The Psychosocial System: Emotion, Social Cognition, Mental Health
- The Environmental System: Home, Work, Community Integration
- Technologies & Devices: Physical Agents, EMG, Virtual Reality

COURSE EXPECTATIONS & REQUIREMENTS

- Full course attendance (SELF-STUDY & LAB) is required to earn the CNS designation.
- Participants must complete the SELF-STUDY (20 hours) before the In-Person LAB (10 hours).
- Labs must be completed in-person and may not be completed remotely. Participants must sign in and out each day.
- Hands-on participation is required for all labs.
- Participants must demonstrate proficiency in all labs (as measured by a competency checklist) to meet the CNS certification standards.
- Participants must complete a final assessment (CNS Certification Exam) within 7 days of their scheduled lab date.

EDUCATIONAL LEVEL

The CNS Certification Course is an advanced-level course. Participants are required to demonstrate hands-on competency, and will be expected to develop, design, and integrate complex treatment protocols by the end of the course.

INSTRUCTIONAL METHODS

Lectures, labs, videos, demonstrations, discussion, case studies, role-play scenarios, blended/hybrid.

TARGET AUDIENCE

This certification course is intended as an advanced-level course for Occupational Therapists, Occupational Therapy Assistants, Physical Therapists, & Physical Therapist Assistants.

Other healthcare professionals interested in neuro-rehabilitation are welcome to attend (professional license and degree from an accredited college or university is required). Please verify with your State or National Board for CEU eligibility.

CERTIFICATION REQUIREMENTS

- I. Complete the CNS Certification Course:
 - SELF-STUDY: 20-hours of online content (self-paced)
 - LAB: 10-hours of hands-on learning activities (in-person)

II. Complete the CNS Certification Exam:

- There are NO extra fees for the CNS Certification Exam.
- Participants must receive a passing score of 80% to obtain the CNS designation and earn continuing education credits.
- Participants will have access to the web-based certification exam immediately after the in-person lab; participants must pass the exam within 7 days of their scheduled lab date.
- Participants who do not pass the exam on the first attempt will have an opportunity to remediate on the same day.

III. Renewal

- After the initial five-year certification period, a renewal application and application fee (\$65.00) is required to maintain certification status every five years. Individuals must provide documentation of the following continuing education (CE) requirements (24 hours total):
 - Minimum of 8 hours from any CNS Advanced Course.
 Note: Practitioners who complete any CNS Advanced Course will earn the designation "CNS-Advanced."
 - Remaining 16 hours of continuing education may be completed from any course related to neurological conditions or deficits.
 - If audited, applicants must submit evidence of continuing education hours. Approved documentation may include CE transcripts, letters, or certificates from organizations, courses, seminars, workshops, etc.

CONTACT HOURS & CEUS

30 contact hours (3.0 AOTA CEUs) for Occupational Therapists and Occupational Therapy Assistants via the American Occupational Therapy Association (AOTA) Approved Provider Program; please see the list of participating states at www.aota.org.

30 contact hours for Physical Therapists and Physical Therapist Assistants through California Education Connection (Approval Number: CEC-1007) in the State of California and other states where pre-approval is not required. Please verify with your individual State Board for CEU/PDU eligibility. The American Physical Therapy Association does not pre-approve continuing education courses. The Neuro Specialist Institute only seeks pre-approval from the Physical Therapy State Board for its host state.

The Neuro Specialist Institute does not submit continuing education information on a participant's behalf (e.g., CE Broker); each individual participant is responsible for submitting documentation to their individual State Board.

The assignment of AOTA CEUs does not imply endorsement of specific course content, products, or clinical procedures by AOTA or indicate AOTA approval of a certification or other professional recognition.

CONTACT HOURS: 30.0 hours AOTA COURSE APPROVAL ID#: 02708 CALIFORNIA PT/PTA APPROVAL#: CEC-1066



SAMPLE AGENDA – SELF-STUDY (20 HOURS) ONLINE

| Topic | Video Time |
|-----------------------------------------------------------------|---------------|
| Introduction | 11 Min. |
| Overview of Course | |
| Part 1 – Neurological Foundations | 1 Hr. |
| Overview of Stroke | 5 Min. |
| Overview of Brain Injuries | |
| Neuroplasticity | |
| Literature Review of Neuro Rehabilitation | |
| Certified Neuro Specialist (CNS) Framework – Mixed Methods | |
| Part 2 – Evaluation, Clinical Measures, & Imaging | 2 Hr. |
| Clinical Assessments | 27 Min. |
| Structural & Functional Brain Scans | |
| Understanding Motor Control, Synergies, and Spasticity | |
| Fugl-Meyer Assessment – UE & LE | |
| Modified Tardieu Scale | |
| Part 3 – The Physical System: Motor Control & Movement Analysis | 49 Min, |
| Motor Relearning Strategies and Interventions | |
| Movement Analysis | |
| Task Analysis | |
| Constraint-Induced Movement Therapy (CIMT) | |
| Part 4 – The Physical System: Facilitation of Movement | 2 Hr. |
| Therapeutic Handling | 45 Min. |
| Lit. Review of Traditional Techniques: NDT, PNF, & Rood | |
| Facilitation of Complex Movement via Task Analysis | |
| Mobilization and Traction | |
| Therapeutic Taping | |
| Electrical Stimulation | |
| Secondary Conditions: Winging, Subluxation, & Impingement | |
| Part 5 - The Perceptual System | 1 Hr. |
| Sensation vs. Perception | 38 Min. |
| Understanding Various Agnosias | |
| Neuroscience of Somatosensory Pathways | |
| Multi-Sensory Integration | |
| Vision and Visual Perception: Intervention Strategies | |
| Pusher's Syndrome | |
| | |

| Topic | Video | |
|------------------------------------------------------------|------------------|--|
| Part 6 The Cognitive System | Time 2 Hr. | |
| Part 6 – The Cognitive System Glasgow Coma Scale | 2 ΠΙ. 58 Min. | |
| Rancho Los Amigos Levels of Cognitive Functioning | 20 141111 | |
| Attention & Memory: Neuroscience & Intervention Strategies | | |
| Rivermead Behavioral Memory Test | | |
| Executive Functions | | |
| Action Observation Therapy | | |
| Mental Practice | | |
| Mirror Visual Feedback | | |
| Mental Timing | | |
| Part 7 – Language & Communication | 1 Hr. | |
| Overview of Audition | 23 Min. | |
| Neuroscience of Communication | | |
| Aphasia, Apraxia, & Dysarthria | | |
| Aphasia Interventions | | |
| Part 8 - The Psychosocial System | 2 Hr. | |
| Social Cognition | 30 Min. | |
| Behavior Management | | |
| Self-Awareness Training | | |
| Cognitive Control of Emotions | | |
| Depression, Anxiety, PTSD, and Lability | | |
| Substance Abuse and Disorders | | |
| Part 9 - The Environmental System | 2 Hr. | |
| ADA & FHA Standards | 37 Min. | |
| Home Assessments | | |
| Workplace Evaluations | | |
| Conditioning vs. Hardening vs. Transitional Work | 4 l la | |
| Part 10 - Technologies & Devices | 1 Hr. | |
| Common Orthotic Devices | 48 Min. | |
| Custom Devices for Dual Conditions | | |
| Electromyography (EMG) Virtual Reality | | |
| The Future of Neurorehabilitation | | |
| TOTAL TIME | 20 Hr | |
| 13 TALL TIME | 11 Min. | |
| | | |

SAMPLE AGENDA - LAB (10 HOURS) IN-PERSON

| Time | Topic |
|------------------|-----------------------------|
| 7:30 - 8:00 AM | Registration |
| 8:00 - 8:15 AM | Introduction & Lab Overview |
| 8:15 - 9:30 AM | Facilitation of Movement |
| 9:30 - 10:45 AM | Stance, Gait, & Stairs |
| 10:45 - 12:15 PM | EMG & E-Stim |
| 12:15 - 1:00 PM | Lunch Break |
| 1:00 - 2:15 PM | Therapeutic Taping |
| 2:15 - 3:30 PM | Cognition & Language |
| 3:30 - 4:45 PM | Technologies & Devices |
| 4:45 - 5:45 PM | Environment & Vision |
| 5:45 - 6:00 PM | Q&A, Conclusion |
| 6:00 - 6:30 PM | Certification Exam |

NOTES

- Participants may be divided into small groups, with schedule subject to change.
- Participants must bring a personal electronic device to complete the certification exam at the end of the LAB.

SPECIAL NEEDS & ACCOMMODATIONS

If participants require special needs or accommodations, please contact The Neuro Specialist Institute at least 60 days prior to the course via email: info@neurospecialist.org.

AGREEMENTS

By registering, participants agree to the **Important Information & Disclaimers**, **Terms & Conditions**, and **Privacy Policy**, accessible online at <u>www.neurospecialist.org/certification</u>.

CANCELLATION/POSTPONEMENT POLICY

Participants will have immediate access to digital content for the SELF-STUDY component of the course; therefore, all sales are FINAL and participants are not eligible for any refund. If participants wish to postpone their LAB date, they must notify The Neuro Specialist Institute in writing at least 90 days prior to their lab. A \$150 postponement fee will apply. Postponement is not guaranteed and is dependent on availability. The Neuro Specialist Institute is unable to accommodate postponement requests made after the 90-day period. Registrants who do not attend their scheduled LAB will forfeit their course fee, and are not eligible to complete the certification process.

COVID-19 PROTOCOLS & ACCOMMODATIONS

Participants must adhere to all Federal/State/County regulations; comply with safety protocols set by the venue; and sign a liability waiver. Due to Covid-19, the course location is subject to change in order to meet evolving regulations. The Neuro Specialist is not responsible for any attendee expenses including, but not limited to, travel and lodging.

DISCLAIMERS

 ${\sf CNS}^{\it \&}$ is a certification mark that is federally registered and protected by the United States Patent and Trademark Office (USPTO). All rights reserved.

The "CNS" designation indicates that a healthcare practitioner has completed advanced-level training in neurological rehabilitation through a series of workshops/seminars, and has successfully passed a certification examination. Certification indicates that a person has met the specific requirements of the certification process, but is not a guarantee of any treatment processes, results, or outcomes. The "CNS" designation does not expand a professional's scope of practice. It does not qualify a healthcare professional to offer or provide professional services without appropriate licensure or credentials.

The Neuro Specialist Institute shall not be liable for any loss, damage, injury, claim, or otherwise, whether an action in contract or tort and shall further not be liable for any lost profits, or direct, indirect, special, punitive, or consequential damages of any kind (including, without limitation, attorneys' fees and expenses).

The Neuro Specialist Institute reserves the right to screen applicants prior to registration in order to determine if they meet professional, legal, and ethical requirements. Only applicants in good standing (not subject to any sanction, suspension, or disciplinary censures) and without history of any legal/ethical/academic disciplinary actions will be given consideration to take any course by The Neuro Specialist Institute.

SPEAKERS

Michael Ang

OTD, OTR/L, CNS, CBIS, HTC, PAM, SWC, CKTP, CAPS, PWR!, LSVT-BIG, AIB-VRC

Michael earned his Doctor of Occupational Therapy at the University of Southern California. Subsequently, he created the Outpatient Occupational Therapy Program at St. Vincent Medical Center in Los Angeles, where he specialized in treating neurological and upper extremity conditions. He holds several advanced practice certifications in neurological rehabilitation, and has clinical experience in acute care, intensive care, transitional care, inpatient rehab, outpatient rehab, skilled nursing, assisted living, and home health occupational therapy.

Michael is a former professor at the University of Southern California's Division of Occupational Science and Occupational Therapy where he won the Penelope Louise Richardson Award for Teaching in 2014. Michael currently teaches at West Coast University's Occupational Therapy Program. Michael won a RAISE Award (Raising Awareness in Stroke Excellence) with the National Stroke Association in 2018, the Occupational Therapy Faculty of the Year Award in 2019, and the inaugural NBCOT Impact Award in 2021.

Speaker Disclosures:

Financial: Michael Ang is compensated by The Neuro Specialist Institute as the primary instructor for the CNS Certification Course, and is the Institute's Director of Clinical Education.

Non-financial: Michael Ang is a Professor of Occupational Therapy at West Coast University in Los Angeles.

Jennyfer Oh

DPT, PT, NCS, PWR!, CNS

Jennyfer earned her Doctor of Physical Therapy at West Coast University in Los Angeles, where she was awarded the Academic Achievement Award. She expanded her knowledge and skillset in treating the neurologic patient population by undergoing her residency at Casa Colina Hospital and Centers for Healthcare. Jennyfer has clinical experience in acute care, inpatient rehabilitation, outpatient rehabilitation, and home health. Currently, she works at the California Rehabilitation Institute treating patients with cerebrovascular accidents, vestibular dysfunction, Parkinson's Disease, spinal cord injuries, and traumatic brain injuries.

Jennyfer is an adjunct professor at several physical therapy programs, including West Coast University, The University of Southern California, and Mount Saint Mary's University. She is a Board Certified Neurologic Clinical Specialist, Credentialed Clinical Instructor with the American Physical Therapy Association, a Certified Parkinson Wellness Recovery (PWR!) Therapist. Additionally, Jennyfer enjoys volunteering at the Academy of Neurologic Physical Therapy.

Speaker Disclosures:

Financial: Jennyfer Oh is compensated by The Neuro Specialist Institute as an instructor for the CNS Certification Course.

Non-financial: Jennyfer Oh is an Adjunct Assistant Professor West Coast University, The University of Southern California, and Mount Saint Mary's University