

Course Information Sheet

Course Title: *Brain Health and Exercise*

Course Description: This book provides exercise professionals with a practical framework for integrating brain health into exercise programming. Combining current research with real-world application, it explores how physical activity influences brain function across the lifespan and equips readers with evidence-based strategies they can immediately apply in clinical, community, and fitness settings. While clients may not need a detailed explanation of the neuroscience behind these recommendations, understanding the underlying science empowers professionals to make informed decisions, communicate with confidence, and design more effective programs.

Beyond practical programming, this resource addresses an important gap in traditional fitness education by introducing foundational neuroscience concepts relevant to exercise and cognitive health. Readers will gain an accessible understanding of brain structure and function, age-related cognitive changes, and the growing body of evidence demonstrating how lifestyle behaviors—particularly exercise—can support brain health, cognitive performance, and healthy aging.

Most importantly, the book bridges the gap between science and practice. It provides guidance for designing, implementing, and adapting exercise programs with specific cognitive and brain health goals, while demonstrating how to incorporate cognitive challenges in a progressive and meaningful way. Readers will also explore the value of interdisciplinary collaboration, learning strategies for partnering with allied health professionals to better support individuals with a wide range of cognitive, neurological, and clinical needs. Whether working with healthy adults, older populations, or individuals with cognitive concerns, exercise professionals will leave with the knowledge and practical tools to confidently integrate brain health into their everyday practice.

Paperback 328 pages

Learning Objectives:

1. Describe the basic anatomy and function of the brain and explain how key brain regions contribute to cognition, movement, and behavior.
2. Explain the physiological mechanisms through which physical activity and exercise influence brain health, neuroplasticity, and cognitive function.
3. Differentiate between normal age-related cognitive changes and pathological cognitive decline, recognizing factors that influence brain aging.
4. Discuss the impact of lifestyle behaviors—including physical activity, sleep, nutrition, stress management, and social engagement—on brain health across the lifespan.
5. Review current scientific evidence related to exercise and brain health to support evidence-based programming decisions.

6. Design individualized exercise programs that incorporate specific brain health and cognitive performance objectives for diverse populations.
7. Integrate cognitive training strategies and dual-task activities into exercise programs using safe, progressive, and evidence-based approaches.
8. Explain how to modify exercise prescriptions to meet the cognitive, physical, and functional needs of individuals with varying levels of cognitive ability or neurological conditions.
9. Discuss the impact of collaboration with healthcare and allied health professionals to support interdisciplinary approaches that optimize cognitive function, brain health, and overall well-being.

Target Audience: Beginner/Intermediate/ Advanced

Schedule and Format: Self-paced home study

Registration Fees: See our website for details: www.exerciseetc.com

Cancellation/Refund Policy: After you get your home study course you have three days to change your mind and ask for a full refund. Just notify us within the three day window and then return the book to use in saleable condition. That's it. No questions asked.

Instructor/Author Credentials

Ryan Glatt, PhD(c), MSc, CPT, ACE-CMES, NBC-HWC, is a certified personal trainer and a board-certified health and wellness coach with over a decade of experience. He focuses his exercise and health coaching strategies on brain health, personalizing lifestyle interventions for individuals with brain and cognitive health goals.

Glatt has studied at the Amen Clinics, the BrainFirst Institute, the Neuroscience Academy, and the Academy for Brain Health and Performance. He has a master's of applied neuroscience from King's College of London and is currently a PhD candidate in the Leadership: Health and Human Performance program through Concordia University of Chicago.

Glatt is a senior brain health coach and the director of the FitBrain program at Pacific Neuroscience Institute. As the developer of the program, he combines brain and body training (also called dual-task training) through "serious exergaming" (purposeful, goal-oriented games that involve physical movement), which utilizes innovative technologies to train cognitive and physical skills simultaneously. His passion for "games for good" has continued into the realm of brain health, and he actively consults for several technology companies in clinical exergaming, gamified rehabilitation, and dual-task training.

He also has a passion for continued education; he developed the first comprehensive course on brain health and exercise for health and fitness professionals, the Brain Health Trainer course, which is distributed by the American Council on Exercise (ACE).

He is an experienced international speaker on the topic of brain health and exercise and enjoys educating professionals in a variety of settings.

Aimee Nicotera, MS, ACSM-EP, ACE-GFI, AFAA PFT, AHHPS Level 3, AFAA GFI, is an international fitness presenter, owner of her own personal training business and virtual fitness studio, with over 30 years of experience. She has served in roles such as health coach, high school health educator, corporate wellness advisor, and fitness director. With extensive experience creating and developing group fitness programs and consulting, researching, and writing for fitness companies—including Spartan, Life Time, and MOSSA—she is always exploring ways to create innovative fitness and wellness experiences.

Nicotera holds a bachelor's degree in nutrition science, a master's degree in health education, and numerous certifications, including ACSM's Exercise Physiologist certification, ACE's Group Fitness Instructor certification, and AFAA's Personal Fitness Trainer credential. She holds the Institute of Motion's Level 3 Applied Health and Human Performance Specialist credential, and she is creator of the fitness DVD series 2×2 Conditioning and Take 20! as well as the E5 Collective, a science-based brain and body fitness format. She is a Master Trainer for Core Health & Fitness and co-lead for their CoreFit Cycle program powered by Schwinn. Aimee is the 2024 IDEA World Fitness Instructor of the Year. As a board member of Youth Athletic Foundation, Aimee is actively involved in promoting and supporting local youth in Cape Cod, MA, and surrounding areas, to embrace active lifestyles.

Contact Hours/CEUs/CECs: See our website for details: www.exerciseetc.com

Sponsors: N/A