

# Pharmacology Fundamentals for Therapists

Mark Nash PhD, FACSM



## Faculty

Mark S. Nash, PhD, FACSM is a dynamic instructor who is highly regarded for his ability to take complex information and make it meaningful and clinically relevant. His pharmacology courses are acclaimed for ease of understanding and relevance to therapy practice. He is a tenured Professor of Neurological Surgery and Rehabilitation Medicine at the Miller School of Medicine, University of Miami, Principal Investigator for The Miami Project to Cure Paralysis, and Director of Research in Rehabilitation Medicine. He holds graduate degrees in Human Biology, Applied Physiology, and Clinical Anatomy, and was a Doctoral Fellow focusing on rehabilitation of ischemic heart disease. Dr. Nash has taught doctoral coursework in Pharmacology in two distinguished Physical Therapy Programs and has presented more than 100 continuing education programs nationwide. He has published more than 100 manuscripts, scholarly monographs, and book chapters on topics in rehabilitation physiology.

Disclosure: Financial: Dr. Nash receives a speaking fee from Education Resources for this course. Non Financial: He has no non financial relationships to disclose

## About this Course

Patients undergoing therapy routinely take both prescription drugs and OTC medicines that ultimately influence treatment outcomes. Therapists with knowledge of these medicines practice safer, more effective therapy. The course will examine Rx and non-Rx medicine used in the therapy setting and will cover side effects that influence treatment and outcomes. Information will focus on drug actions and patient errors when treating pain, as well as common disorders of the musculoskeletal, neurologic, cardiorespiratory, and endocrine systems. Common OTC drugs and herbals are examined for occult hazards and drug interactions. Electronic resources for free drug-related information will be demonstrated.

## Objectives

Upon completion of this course, the participant will:

- ❶ Describe basic factors that control drug uptake, bioavailability, and metabolism.
- ❷ List benefits, limitations, and adverse effects of drug families used to treat inflammation and pain.
- ❸ Classify drug families and drugs used to treat disorders and diseases of the musculoskeletal, neurological, cardiorespiratory, and endocrine systems.
- ❹ Describe how drug choices and administration influence therapy outcomes, including common errors in drug administration committed by patients.
- ❺ Define potential harms and drug interactions for over the counter medications and herbals

## Audience

This course will target clinicians working with adults across the lifespan with pain, and conditions of the musculoskeletal, neurologic, cardiorespiratory and endocrine systems that require medication use.

Help your patients achieve better outcomes.

## Schedule – Day 1

<b>7:30-8:00</b>	Registration/Continental Breakfast
<b>8:00-8:45</b>	Key Principles of Pharmacology: Drug Classification, Uptake, Distribution, and Interactions
<b>8:45-10:00</b>	Drug Treatment of Pain and Inflammation General Principles of Pain and Inflammation Management: Benefits and problems in Nociceptive Pain vs. Neuropathic Pain
<b>10:00-10:15</b>	Break
<b>10:15-11:15</b>	Drug Treatment of Musculoskeletal Disorders Osteoarthritis: Rx, OTC, and Neutraceuticals Rheumatoid Arthritis and Immune Hypersensitivity Hypertonia and Spasm
<b>11:15-11:45</b>	Drug Treatment of Respiratory Disorders Asthmatic Bronchitis and COPD Sinusitis and Rhinitis
<b>11:45-12:00</b>	Drug Treatment of Cardiovascular Disorders Hypertension
<b>12:00-1:00</b>	Lunch (on your own)
<b>1:00-1:45</b>	Drug Treatment of Cardiovascular Disorders (cont.), Heart Failure Atherosclerotic Disorders, Clotting and Circulatory Deficiency

## Schedule – Day 1 (cont.)

<b>1:45-3:00</b>	Drug Treatment of Nervous System Disorders, Depression Anxiety Parkinsonism Alzheimer's Dementia Stroke
<b>3:00-3:15</b>	Break
<b>3:15-4:00</b>	Drug Treatment of Endocrine Disorders Obesity Diabetes (Type I and Type II) Osteoporosis (Male and Female)
<b>4:00-4:15</b>	Non-RX Medications and Herbals
<b>4:15-4:30</b>	Free Internet and Smartphone Resources

"This is one of the most informative and interesting courses I have been to in years. Dr. Nash was fantastic, I would recommend this course to any discipline in need of a good pharmacology review."  
— S. Maciejewski, PT

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## Credits

This course meets the criteria for 7 contact hours (0.7 CEUs). Application has been made to the **NJ** Board of PT Examiners. The **PA** and **RI** Boards of Physical Therapy accept other Board's approvals. This course meets accepted standards for continuing education in **CT**, **MA** and **NH**.

Approved provider by the **NY** State Board of Physical Therapy for 8 hours for



Approved provider of continuing education by the American Occupational Therapy Association #3043, for 7 contact hours - Intermediate Level Occupational Therapy Process: assessment, intervention. The assignment of AOTA CEUs does not imply endorsement of specific course content, products or clinical procedures by AOTA.



Education Resources, Inc is approved by the Continuing Education Board of the American Speech-Language-Hearing Association (ASHA) to provide continuing education activities in speech-language pathology and audiology. See course information for number of ASHA CEUs, instructional level and content area. ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.

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Please contact us with any special needs requests:  
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## Locations and Dates - 2019

**October 12** Framingham, MA MetroWest Medical Center

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### Pharmacology Fundamentals/Nash

☐ Oct/MA

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Needed in the event of an emergency scheduling change

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