

# Pharmacology Fundamentals for Therapists

Mark Nash PhD, FACSM



## Faculty

Mark S. Nash, PhD, FACSM FASIA 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, Associate Director for the Center of Excellence in Spinal Cord Research, and Vice-Chair for 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 120 continuing education programs nationwide. He has published more than 180 manuscripts, scholarly monographs, and book chapters on topics in rehabilitation physiology and has been honored for lifetime achievements in rehabilitation by the American Congress of Rehabilitation Medicine.

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:

- 1 Describe basic factors that control drug uptake, bioavailability, and metabolism.
- 2 List benefits, limitations, and adverse effects of drug families used to treat inflammation and pain.
- 3 Classify drug families and drugs used to treat disorders and diseases of the musculoskeletal, neurological, cardiorespiratory, and endocrine systems.
- 4 Describe how drug choices and administration influence therapy outcomes, including common errors in drug administration committed by patients.
- 5 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 (EST)

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

## Schedule – Day 1 (cont.) (EST)

- 1:15-2:30** Drug Treatment of Nervous System Disorders,
  - Depression
  - Anxiety
  - Parkinsonism
  - Alzheimer’s Dementia
  - Stroke
- 2:30-2:45** Break
- 2:45-4:00** Drug Treatment of Endocrine Disorders
  - Obesity
  - Diabetes (Type I and Type II)
  - Osteoporosis (Male and Female)
- Non-RX Medications and Herbals
- 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) Intermediate Level.



Education Resources Inc. is an AOTA Approved Provider of professional development. Provider #3043. This Distance Learning-Interactive course is offered at 7 contact hours 0.7 CEUs. Intermediate level, OT Service Delivery. AOTA does not endorse specific course content, products, or clinical procedures.

This course can be used toward your NBCOT renewal requirements for 7 units.

Approved provider of the **FL** Board of Occupational Therapy-CE Broker – 8 hrs. This course meets the approval of the **TX** Board of OT Examiners.



**Education Resources, Inc.**  
Intermediate Level  
0.7 ASHA CEUs

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ASHA credits are accepted by the **TX** Department of License and Renewal.

Application has been made to the **FL** Physical Therapy Association for 8 continuing education contact hours.

Application has been made to the **MD** Board of Physical Therapy Examiners. Application has been made to the **MN** Board of Physical Therapy.

Application has been made to the **NJ** Board of Physical Therapy Examiners. Application has been made to the **OH** Physical Therapy Association

Approved sponsor by the State of **IL** Department of Financial and Professional Regulation for Physical Therapy for 8 contact hours.

Approved provider by the **NY** State Board of Physical Therapy for 8 contact hours (0.8 CEUs). Education Resources, Inc. is an approved provider for Physical Therapy CEUs in the following states: **CA, KY, OK** and **TX**.

The following state boards of physical therapy accept other states' approval: **AK, AR, AZ, DC, DE, GA, HI, ID, IN, KS, MA, MI, MO, MS, NC, OR, PA, RI, SC, UT, VA, VT, WI, WY**. The following state boards of physical therapy either do not require course pre-approval or do not require CEUs for re-licensure: **AL, CO, CT, IA, ME, MT, NE, ND, NH, SD, WA**.

7 hours of this course qualify towards the discipline-specific hours for the 20-hour requirement for NDTA re-certification. They do NOT qualify towards the 8-hour NDTA Instructor requirement for re-certification. Education Resources Inc. 266 Main St, Medfield, MA 02052.

Please contact us with any special needs or requests: [info@educationresourcesinc.com](mailto:info@educationresourcesinc.com)

## Dates - 2023

**October 28, 2023**      **Live Webinar**      8:00 am - 4:00 pm

or

**October 29, 2023**      **Live Webinar**      8:00 am - 4:00 pm



**Pharmacology Fundamentals/Nash**

**October 28, 2023** or  **October 29, 2023**

**Course Registration Form**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Work Phone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_

Needed in the event of an emergency scheduling change

Email: \_\_\_\_\_

Please clearly print your email address for course confirmation

Employer: \_\_\_\_\_

Discipline: \_\_\_\_\_ Specialty: \_\_\_\_\_

How did you learn of this course \_\_\_\_\_

Education Resources reserves the right to cancel any course due to insufficient registration or extenuating circumstances. Please do not make non-refundable travel arrangements until you have called us and received confirmation that the course will be held. We are not responsible for any expenses incurred by participants if the course must be cancelled.

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