Physical Therapy

Physical therapy is the science of human movement applied to rehabilitation, injury, fitness, injury prevention and overall health. Practicing in a variety of settings, physical therapists diagnose and treat movement dysfunction in patients with skill, competence and compassion. The Program in Physical Therapy is committed to providing students with excellent scientific and clinical education in an environment that strives to continually lead the industry in practice, research, innovation and advocacy of movement health.

The Program in Physical Therapy at the School of Medicine offers two formal curricula that collectively foster opportunities for lifelong learning and comprehensive career development: the Doctor of Physical Therapy (http://bulletin.wustl.edu/medicine/degrees-offerings/dpt/) and the PhD in Movement Science (http://bulletin.wustl.edu/medicine/degrees-offerings/movement-science-phd/).

The Human Movement System Approach

The Program in Physical Therapy has pioneered a unique, movement-based approach to physical therapy. The human movement system is at the core of our approach to physical therapy education, research and patient care. This system consists of physiological organ systems that interact to produce and support the movement of the body and its parts. Movement science is the study of the movement system, and we believe physical therapists are the world’s movement system experts.

Our program (https://outlook.wustl.edu/movement-redefined/) has pioneered the development of movement-focused physical therapy education, research and treatment. The human movement system continues to be our foundation for treating patients, conducting research, and training the next generation of leaders in physical therapy. Our vision is aligned with the vision of the American Physical Therapy Association (APTA) (http://www.apta.org/), which is to “transform society by optimizing movement to improve the human experience.”

Additional Information

Further information, including complete admissions instructions and program descriptions, may be obtained through direct correspondence with the Program in Physical Therapy:

Program in Physical Therapy
Washington University School of Medicine
4444 Forest Park Avenue, CB 8502
St. Louis, MO 63108-2212
Fax: 314-286-1410
Phone: 314-286-1400
Email: ptadmissions@email.wustl.edu
Website: https://pt.wustl.edu

Degrees & Offerings

- Doctor of Physical Therapy (http://bulletin.wustl.edu/medicine/degrees-offerings/dpt/)
- PhD in Movement Science (http://bulletin.wustl.edu/medicine/degrees-offerings/movement-science-phd/)

Research

The mission of the Research Division is to understand how the movement system (https://pt.wustl.edu/about-us/) is affected by disease, injury, lifestyle, development and aging and to understand how movement can be used to promote health by enhancing physical function, activity and participation across the lifespan.

Our interdisciplinary scientific endeavors include mechanistic and translational investigations at all levels of organization, from the cell to society. Our research (https://pt.wustl.edu/research/our-research-areas/) is supported by millions of dollars in federal, private foundation and university funding. We pursue knowledge in a collaborative work environment within the Movement Science Research Center (https://pt.wustl.edu/research/movement-science-research-center/).

Our doctoral and postdoctoral Research Training Programs (https://pt.wustl.edu/research/research-training-programs/) prepare students for careers at the forefront of physical therapy and movement science research.

Research Areas

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Faculty Investigators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot &amp; Ankle Injury &amp; Recovery</td>
<td>Mary K. Hastings, PT, DPT, MSCI, ATC</td>
</tr>
<tr>
<td>Integrative Muscle Physiology</td>
<td>Gretchen A. Meyer, PhD</td>
</tr>
<tr>
<td>Movement &amp; Neurodegenerative Disease</td>
<td>Gammon M. Earhart, PT, PhD</td>
</tr>
<tr>
<td>Movement &amp; Neurodegenerative Disease</td>
<td>Ryan P. Duncan, PT, DPT</td>
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<tr>
<td>Neural Control of Movement Following Neurological Injury</td>
<td>Laura McPherson, PT, DPT, PhD</td>
</tr>
<tr>
<td>Neural Plasticity and Sensory Integration</td>
<td>Jacob McPherson, PhD</td>
</tr>
<tr>
<td>Orthopaedic Biomechanics</td>
<td>Michael D. Harris, PhD</td>
</tr>
<tr>
<td>Prevention, Rehabilitation &amp; Maintenance in Musculoskeletal Conditions</td>
<td>Linda Van Dillen, PT, PhD, FAPTA</td>
</tr>
<tr>
<td>Quantitative Methodology and Rehabilitation Informatics</td>
<td>Keith Lohse, PhD, PStat</td>
</tr>
<tr>
<td>Rehabilitation Research for Orthopaedic Conditions</td>
<td>Marcie Harris-Hayes, PT, DPT, MSCI</td>
</tr>
<tr>
<td>Shoulder Biomechanics and Rehabilitation</td>
<td>Rebekah Lawrence, PT, PhD</td>
</tr>
<tr>
<td>Stroke Recovery &amp; Rehabilitation Accelerometry</td>
<td>Catherine Lang, PT, PhD</td>
</tr>
<tr>
<td>Stroke Recovery &amp; Rehabilitation Accelerometry</td>
<td>Margheritta D. Bland, PT, DPT, NCS</td>
</tr>
<tr>
<td>Stroke Recovery, Rehabilitation, and Accelerometry</td>
<td>Carey L. Holleran, PT, MPT, DHS, NCS</td>
</tr>
<tr>
<td>Tendon Rehabilitation</td>
<td>Jennifer Zellers, PT, DPT PhD</td>
</tr>
<tr>
<td>Whole Body &amp; Joint-Level Orthopaedic Biomechanics</td>
<td>Michael D. Harris, PhD</td>
</tr>
</tbody>
</table>

**Movement Science Research Center**

The Movement Science Research Center is approximately 13,000 square feet of newly renovated space that provides a collaborative environment for faculty, PhD students and postdoctoral fellows to conduct rehabilitation research.

The facility includes numerous private rooms for clinical interventions and state-of-the-art equipment.

<table>
<thead>
<tr>
<th>Equipment List</th>
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<tbody>
<tr>
<td>Accelerometer activity monitors</td>
</tr>
<tr>
<td>Balance platform</td>
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<tr>
<td>Biological sample processing equipment</td>
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<tr>
<td>Biplane videoradiography</td>
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<tr>
<td>Cell culture suite</td>
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<tr>
<td>Dynamometers</td>
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<tr>
<td>Electromyography</td>
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<tr>
<td>Eye tracking</td>
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<tr>
<td>Force platforms</td>
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<tr>
<td>Function generators</td>
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<tr>
<td>GAITRite instrumented walkway</td>
</tr>
</tbody>
</table>

**Research Training Programs**

We offer physical therapy research training programs designed to prepare students at the doctoral and postdoctoral levels for careers in groundbreaking physical therapy research.

**PhD in Movement Science**

Under the Movement Science Program, students work on the research topics that interest them while completing course work that prepares them for their research careers. The Movement Science Program encourages collaboration with other departments within the School of Medicine.

Visit the Program in Physical Therapy website for more information about the Movement Science Program (https://pt.wustl.edu/education/phd-in-movement-science/).

**Postdoctoral Fellowship in Movement Science**

Our Postdoctoral Fellowship in Movement Science offers an opportunity to develop and complete research projects related to movement science and rehabilitation. Fellows are encouraged to collaborate with other faculty and programs in the School of Medicine.

Visit the Program in Physical Therapy website for more information about the Postdoctoral Fellowship (https://pt.wustl.edu/education/postdoctoral-fellowship-in-movement-science/).

**Comprehensive Opportunities in Rehabilitation Research Training Program**

The Comprehensive Opportunities in Rehabilitation Research Training (CORRT) Program is a multicenter career development program for physical and occupational therapists.

Visit the CORRT website for more information about the CORRT Program (https://www.corrt.pitt.edu/).

**Institute of Clinical and Translational Sciences**

The Institute of Clinical and Translational Sciences (ICTS) offers programs designed to support investigators at each phase of their clinical and translational research studies.

Visit the ICTS website for more information about the ICTS (https://icts.wustl.edu/).

**Clinical Research Training Center**

The Clinical Research Training Center (CRTC) fosters clinical research training and career development for predoctoral students, house staff, postdoctoral fellows and faculty.
Visit the CRTC website for more information about the CRTC (https://crtc.wustl.edu/).

**Faculty**

Gammon Earhart, PT, PhD (https://pt.wustl.edu/people/gammon-m-earhart-pt-phd-fapta/)
Executive Director, Program in Physical Therapy

Steve Ambler, PT, DPT, PhD, MPH
Division Director of Education

Tammy L. Burlis, PT, DPT, CCS (https://pt.wustl.edu/people/tammy-l-burlis-pt-dpt-ccs/)
Director of Clinical Education

Linda Van Dillen, PT, PhD, FAPTA (https://pt.wustl.edu/people/linda-van-dillen-pt-phd-fapta/)
Division Director of Clinical Education

Gregory Holtzman, PT, DPT, SCS (https://pt.wustl.edu/people/gregory-holtzman-pt-dpt-scs/)
Division Director of Research

Visit our website for more information about our faculty (https://pt.wustl.edu/faculty-staff/faculty/) and their appointments.

**A**

Steven B Ambler, M.P.H., D.P.T., Ph.D.
Associate Professor of Physical Therapy (primary appointment)
Associate Professor of Orthopedic Surgery
Division Director of Professional Curriculum in Physical Therapy
Champaign, 2002
Doctor of Physical Therapy, Washington University in St Louis, 2005
Master of Public Health, University of South Florida, 2014
Doctor of Philosophy, University of South Florida, 2016

**B**

Marghuretta Dakota Bland, M.S., D.P.T.
Associate Professor of Physical Therapy (primary appointment)
Associate Professor of Neurology
Associate Professor of Occupational Therapy
Bachelor of Science, Canisius College, 2004
Master of Science, Washington University in St Louis, 2008
Doctor of Physical Therapy, Washington University in St Louis, 2008

Megan Maupin Burgess, D.P.T.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Orthopedic Surgery
Bachelor of Science, University of Virginia, 2006
Doctor of Physical Therapy, Washington University in St Louis, 2010

Tamara Lavon Burlis, M.H.S., D.P.T.
Professor of Physical Therapy (primary appointment)
Director for Clinical Education in Physical Therapy
Associate Director of Professional Curriculum in Physical Therapy
Professor of Medicine
Bachelor of Arts, Wartburg College, 1988

Bachelor of Science, Washington University in St Louis, 1988
Master of Health Science, Washington University in St Louis, 1993
Doctor of Physical Therapy, Washington University in St Louis, 2003

**C**

Billie Ruth Clark, Ph.D.
Professor of Physical Therapy (primary appointment)
Professor of Neurology
Bachelor of Science, Saint Louis University, 1974
Doctor of Philosophy, Saint Louis University, 1988

Suzanne Marie Cornbleet, M.A., D.P.T.
Associate Professor of Physical Therapy (primary appointment)
Associate Professor of Orthopedic Surgery
Bachelor of Science, University of Colorado Boulder, 1975
Master of Arts, Washington University in St Louis, 1987
Doctor of Physical Therapy, Washington University in St Louis, 2003

Beth Elaine Crowner, M.P.P., M.S., D.P.T.
Professor of Physical Therapy (primary appointment)
Professor of Neurology
Bachelor of Science, Washington University in St Louis, 1989
Master of Science, Washington University in St Louis, 1989
Master of Public Policy, University of Missouri in St Louis, 1997
Doctor of Physical Therapy, Washington University in St Louis, 2007

Mary Maureen Crumley, D.P.T.
Assistant Professor of Physical Therapy (Pending Executive Faculty Approval) (primary appointment)
Bachelor of Arts, Luther College Iowa, 2011
Bachelor of Science, Luther College Iowa, 2011
Doctor of Physical Therapy, Saint Ambrose University, 2013

Sylvia Lin Czuppon, M.S., D.P.T.
Associate Professor of Physical Therapy (primary appointment)
Associate Professor of Orthopedic Surgery
Bachelor of Science, Washington University in St Louis, 2000
Master of Science, Washington University in St Louis, 2002
Doctor of Physical Therapy, Washington University in St Louis, 2011

**D**

Robert H Deusinger, M.S., Ph.D.
Associate Professor Emeritus of Physical Therapy
Bachelor of Science, Slippery Rock University (Duplicate of Slippery Rock University of Pennsylvania), 1967
Master of Science, University of Massachusetts (Duplicate of University of Massachusetts Amherst), 1968
Doctor of Philosophy, University of Iowa, 1981

Susan S. Deusinger, M.A., Ph.D.
Professor Emeritus of Physical Therapy
Bachelor of Science, University of Kansas, 1969
Master of Arts, Washington University in St Louis, 1969
Doctor of Philosophy, Washington University in St Louis, 1987

Kathleen Koller Dixon
Instructor Emeritus in Physical Therapy

Ryan Patrick Duncan, M.S., D.P.T.
Gammon Marie Earhart, M.S., Ph.D.
Professor of Physical Therapy (primary appointment)
Professor of Neuroscience
Associate Dean for Physical Therapy
Bachelor of Science, Arcadia University, 1994
Master of Science, Arcadia University, 1996
Doctor of Philosophy, Washington University in St Louis, 2000

Julaine Marie Florence, M.S., D.P.T.
Professor of Physical Therapy
Bachelor of Science, Washington University in St Louis, 1975
Master of Science, Washington University in St Louis, 1983
Doctor of Physical Therapy, Washington University in St Louis, 2002

Michael Dennison Harris, Ph.D.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Orthopedic Surgery
Bachelor of Science, University of Utah, 2007
Doctor of Philosophy, University of Utah, 2013

Mary Kent Hastings, M.S., D.P.T.
Professor of Physical Therapy (primary appointment)
Professor of Orthopedic Surgery
Bachelor of Science, Missouri State University (Formerly Southwest Missouri State), 1994
Master of Science, Northwestern University, 1996
Doctor of Physical Therapy, Washington University in St Louis, 2003

Marcie Harris Hayes, M.S., D.P.T.
Professor of Physical Therapy (primary appointment)
Professor of Orthopedic Surgery
Bachelor of Science, Missouri University of Science and Technology, 2001
Master of Science, University of Nebraska, 2002
Doctor of Physical Therapy, Washington University in St Louis, 2003

Carey Lane Holleran, M.P.T., D.H.Sc.
Associate Professor of Physical Therapy (primary appointment)
Associate Professor of Neurology
Assistant Director of Student Assessment and Program Evaluation in Physical Therapy
Bachelor of Science, Duquesne University, 2003
Master of Physical Therapy, Duquesne University, 2004
Doctor of Health Science, University of Indianapolis, 2014

Gregory William Holtzman, M.S., D.P.T.
Professor of Physical Therapy (primary appointment)

Renee A. Ivens, M.H.S., D.P.T.
Associate Professor of Physical Therapy (primary appointment)
Associate Professor of Orthopedic Surgery
Bachelor of Science, Maryville University of Saint Louis, 1984
Master of Health Science, Washington University in St Louis, 1996
Doctor of Physical Therapy, Washington University in St Louis, 2006

Jill Kristine Johnson, D.P.T.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Orthopedic Surgery
Doctor of Physical Therapy, Washington University in St Louis, 2006

Lynnette C Khoo-Summers, M.S., D.P.T.
Associate Professor of Physical Therapy (primary appointment)
Associate Professor of Orthopedic Surgery
Bachelor of Arts, Colorado State University, 1990
Master of Science, Washington University in St Louis, 1998
Doctor of Physical Therapy, Washington University in St Louis, 2008

Catherine Eckels Lang, M.S., Ph.D.
Professor of Physical Therapy (primary appointment)
Professor of Neurology
Professor of Occupational Therapy
Associate Director of Movement Science PhD Program in Physical Therapy
Bachelor of Science, University of Vermont, 1993
Master of Science, University of Vermont, 1997
Doctor of Philosophy, Washington University in St Louis, 2001

Vanessa Mae Lanier, D.P.T.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Orthopedic Surgery
Bachelor of Science, Washington University in St Louis, 2007
Doctor of Physical Therapy, Washington University in St Louis, 2012

Rebekah Lawrence, D.P.T., Ph.D.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Orthopaedic Surgery
Bachelor of Science, Bradley University, 2006
Doctor of Physical Therapy, Saint Ambrose University, 2008
Doctor of Philosophy, University of Minnesota, 2018
Keith Robert Lohse, M.A., Ph.D.
Associate Professor of Physical Therapy (primary appointment)
Associate Professor of Neurology
Master of Arts, University of Colorado Boulder, 2009
Doctor of Philosophy, University of Colorado Boulder, 2012

Julian Magee, D.P.T.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Director of Diversity, Equity, and Inclusion in Physical Therapy
Assistant Professor of Orthopedic Surgery
Associate of Science, Hinds Community College, 2001
Bachelor of Science, University of West Alabama, 2004
Doctor of Physical Therapy, Alabama State University, 2007

Patricia Navarro McGe, D.P.T.
Associate Professor of Physical Therapy (primary appointment)
Associate Professor of Orthopedic Surgery
Associate Professor of Pediatrics
Assistant Director of Clinical Education in Physical Therapy
Bachelor of Arts, Washington University in St Louis, 2001
Doctor of Physical Therapy, Washington University in St Louis, 2004

Jacob Graves McPherson, M.S., Ph.D.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Anesthesiology
Bachelor of Science, University of North Carolina at Asheville, 2005
Master of Science, Northwestern University, 2008
Doctor of Philosophy, Northwestern University, 2011

Laura Crego Miller McPherson, D.P.T., Ph.D.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Neurology
Bachelor of Science, Vanderbilt University, 2006
Doctor of Physical Therapy, Northwestern University, 2012
Doctor of Philosophy, Northwestern University, 2014

Gretchen Ann Meyer, M.S., Ph.D.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Neurology
Assistant Professor of Orthopedic Surgery
Bachelor of Science, Washington University in St Louis, 2004
Master of Science, Washington University in St Louis, 2004
Doctor of Philosophy, University of California San Diego, 2011

Jennifer Alaine Miller-Katsafanas, D.P.T.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Obstetrics and Gynecology
Bachelor of Arts, University of Missouri in St Louis, 1996
Doctor of Physical Therapy, Washington University in St Louis, 2012

Michael Jeffrey Mueller, M.H.S., Ph.D.
Professor Emeritus of Physical Therapy
Bachelor of Science, Washington University in St Louis, 1979
Master of Health Science, Washington University in St Louis, 1984
Doctor of Philosophy, Washington University in St Louis, 1992

Barbara Jean Norton, M.H.S., Ph.D.
Professor of Physical Therapy (primary appointment)
Associate Director of Education Technology in Physical Therapy
Professor of Neurology
Bachelor of Science, Washington University in St Louis, 1966
Master of Health Science, Washington University in St Louis, 1985
Doctor of Philosophy, Washington University in St Louis, 1996

Kerri S Rawson, M.S., Ph.D.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Neurology
Bachelor of Arts, University of Texas Austin, 2004
Master of Science, University of South Florida, 2009
Doctor of Philosophy, University of South Florida, 2012

Shirley Ann Sahrmann, M.A., Ph.D.
Professor Emeritus of Physical Therapy
Bachelor of Science, Washington University in St Louis, 1958
Master of Arts, Washington University in St Louis, 1971
Doctor of Philosophy, Washington University in St Louis, 1973

David R Sinacore, M.H.S., Ph.D.
Adjunct Professor of Physical Therapy
Bachelor of Science, State University of New York, 1979
Master of Health Science, Washington University in St Louis, 1983
Doctor of Philosophy, West Virginia University, 1992

Nancy Bloom Smith, M.S., D.P.T.
Professor of Physical Therapy (primary appointment)
Professor of Orthopedic Surgery
Bachelor of Arts, University of Virginia, 1976
Master of Science, Washington University in St Louis, 1979
Bachelor of Science, Washington University in St Louis, 1984
Doctor of Physical Therapy, Washington University in St Louis, 2002

Theresa M Spitznagle, M.H.S., D.P.T.
Professor of Physical Therapy (primary appointment)
Professor of Obstetrics and Gynecology
Bachelor of Science, Marquette University, 1986
Master of Health Science, Washington University in St Louis, 1994
Doctor of Physical Therapy, Washington University in St Louis, 2006

Jennifer S Stith, M.S., M.S.W., Ph.D.
Professor Emerita of Physical Therapy
Bachelor of Science, University of California, 1976
Master of Science, University of Southern California, 1979
Doctor of Philosophy, Washington University in St Louis, 1994
Master of Social Work, Washington University in St Louis, 2006

Dale Allen Thuet, D.P.T.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Orthopaedic Surgery
Bachelor of Arts, University of Missouri Columbia, 2004
Doctor of Physical Therapy, Washington University in St Louis, 2009

Stacy Lynne Tylka, M.S., D.P.T.
Associate Professor of Physical Therapy (primary appointment)
Associate Professor of Orthopedic Surgery
Associate Professor of Obstetrics and Gynecology
Bachelor of Science, Saint Louis University, 2000
Master of Science, Saint Louis University, 2002
Doctor of Physical Therapy, Washington University in St Louis, 2009

V

Linda R Van Dillen, M.S., Ph.D.
Professor of Physical Therapy (primary appointment)
Division Director of Research in Physical Therapy
Professor of Orthopedic Surgery
Bachelor of Science, University of Missouri Columbia, 1979
Master of Science, Washington University in St Louis, 1985
Doctor of Philosophy, Washington University in St Louis, 1994

W

Corey B Woldenberg, D.P.T.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Orthopaedic Surgery
Bachelor of Science, University of Kentucky, 2007
Doctor of Physical Therapy, Washington University in St Louis, 2010

Z

Jennifer Ann Zellers, D.P.T., Ph.D.
Assistant Professor of Physical Therapy (primary appointment)
Assistant Professor of Orthopedic Surgery
Bachelor of Science, Arcadia University, 2007
Doctor of Physical Therapy, Columbia University, 2010
Doctor of Philosophy, University of Delaware, 2018

Courses

Visit online course listings to view semester offerings for M02 PhysTher (https://courses.wustl.edu/CourseInfo.aspx?sch=M&dept=M02).

M02 PhysTher 5410 Bioenergetics in Movement Science
Application of the principles of muscle metabolism and energy expenditure to human movement.
Credit 3 units.

M02 PhysTher 5510 Biomechanics
Credit 3 units.

M02 PhysTher 5720 Research in Movement Science
Opportunity to pursue non-dissertation research on an individual basis under the supervision and direction of a Movement Science faculty member. PREREQUISITE, PERMISSION OF INSTRUCTOR AND APPROVAL OF MOVEMENT SCIENCE ADVISOR.
Credit variable, maximum 6 units.

M02 PhysTher 5850 Movement Science Program Seminar
Departmental seminar focused on review of current literature, scholarly presentation, and the development of skills in developing and presenting grant proposals. Required for each of the first four semesters of enrollment in the Movement Science program.
Credit 1 unit.

M02 PhysTher 5890 Movement Science Dissertation
Prerequisite, approval of movement science steering committee
Credit variable, maximum 2 units.

M02 PhysTher 601 Diagnosis and Evidence Analysis in PT Practice I
Includes processes required for effective clinical decision-making such as the use of disablement models, decision trees, diagnostic classification systems, patient interviewing and outcome measures. An introduction to basic research methods and systematic review of the literature. Patient cases will be used to practice clinical decision-making skills.
Credit 2 units.

M02 PhysTher 602 Professional Issues and Skills 1
An introduction to the profession of physical therapy, the APTA, professional behavior and clinical activities such as documentation and quality improvement. Includes ethics, legal issues and policies that guide professional behavior. Students will learn and practice using principles of patient teaching, negotiation and team building. Students will spend 80 hours at clinical sites.
Credit 3 units.

M02 PhysTher 603 Essential Clinical Skills I
Focused and supervised classroom and laboratory teaching experiences at the graduate level. Includes delineation of objectives, learning experiences, and presentation of material in both classroom and laboratory settings. Prerequisite: Permission of instructor. The course requires 6 hours of preparation/presentation each week.
Credit 4 units.

M02 PhysTher 604 Cells, Systems and Disease I
The first of a two-semester course, this course focuses on advanced human physiology and pathological mechanisms of disease. Course content emphasizes cellular and organ system physiology, pathological mechanisms of disease, and medical management of pathological
conditions. Physicians will discuss medical diagnosis, clinical signs and symptoms, and management of selected diseases. Students will be introduced to pharmacology and to the relevance of clinical laboratory values. Patient case studies will be used to integrate information. Credit 4 units.

**M02 PhysTher 605 Neuroscience**
Focuses on the study of structures, organization and function of the nervous and muscular systems. Emphasis is on the sensory and motor systems involved in motor control and on basic knowledge required for clinical practice. Credit 3 units.

**M02 PhysTher 606 Kinesiology I**
An introduction to the analysis of normal human movement activities through the application of mechanical concepts including displacement, velocity, acceleration, force and torque. Emphasizes kinematic and kinetic concepts relevant to human movement and study of the structures involved in movement. Credit 3 units.

**M02 PhysTher 610 Cells, Systems and Disease II**
A continuation of the first semester. Open only to individuals enrolled in the Physical Therapy program. Credit 4 units.

**M02 PhysTher 611 Human Anatomy**
Emphasis is on: 1) Musculoskeletal, neural and vascular systems of the extremities, head, neck and trunk; and 2) anatomical features relevant to current physical therapy practice. Lectures are complemented by student-performed dissection of human cadavers, instructor-prepared prosections and computer-assisted instruction. Open only to individuals enrolled in the Physical Therapy program. Credit 5 units.

**M02 PhysTher 612 Diagnosis and Evidence Analysis in PT Practice II**
Continuation of research methods from the first semester, including use of statistics and outcome measurements. Students will complete a reliability project and write a paper based on the literature. Cases will permit further practice using decision trees and assigning diagnoses of basic movement-related conditions. Open only to individuals enrolled in the Physical Therapy program. Credit 2 units.

**M02 PhysTher 613 Kinesiology II**
Emphasizes principles of maturation and motor learning relative to the application of biomechanical principles to the analysis of human movement. Standardized methods of characterizing movement by observation and with the use of technology will be addressed. Topics include developmental, anatomical, electromyographical and physiological elements of kinesiology with regard to individual joints and common functional activities such as gait and transitional movements. Credit 5 units.

**M02 PhysTher 614 Diagnosis and Management of Musculoskeletal Conditions in PT I**
Students will learn postural assessment and application of Movement Systems Balance. Analysis of functional activities, the essential components and compensatory strategies, will prepare the student to begin to plan interventions for individuals with musculoskeletal problems. Skill in providing interventions of manual exercise, fitness training and functional mobility training will be developed. Cases will provide use of diagnostic systems relevant to musculoskeletal conditions. Credit 3 units.

**M02 PhysTher 615 Professional Issues and Skills Development II**
Students will be assigned to part-time clinical experiences for 45 hours to allow practice of acquired skills in patient care, documentation and communication. Credit 0.5 units.

**M02 PhysTher 621 Exercise Physiology**
A study of the responses of various physiological systems to exercise. Includes application and integration of these systems to various diseases and to human performance. Content will be coordinated with Diagnosis and Management of Cardiopulmonary Conditions in Physical Therapy. Open only to individuals enrolled in the Physical Therapy program. Credit 3 units.

**M02 PhysTher 622 Diagnosis and Management of Cardiopulmonary Conditions in PT**
Students will learn to assess, diagnose and treat movement-related cardiopulmonary conditions. Treatment techniques will include exercise and conditioning, breathing techniques, postural drainage and percussion. Interpretation of laboratory tests and pharmacology will prepare students to work with patients safely. Case studies will prepare students for general practice. Open only to individuals enrolled in the Physical Therapy program. Credit 3 units.

**M02 PhysTher 623 Orthopaedic Medicine**
Physician lectures will provide students with information on surgical and non-surgical procedures and postoperative management of patients with orthopaedic conditions. Physicians will discuss medical diagnosis, clinical signs and symptoms, and management of selected conditions to prepare the student to use this information in Diagnosis and Management of Musculoskeletal Conditions in PT II - III. Open only to individuals enrolled in the Physical Therapy program. Credit 2 units.

**M02 PhysTher 624 Diagnosis and Management of Musculoskeletal Conditions in PT II**
Students will acquire the skills needed to manage and prevent movement-related musculoskeletal problems of the spine and lower quarter. Acute and post-acute care will be addressed. Integration of information from previous and concurrent courses will be stressed with emphasis on screening, examination, analysis of findings, diagnosis, design and implementation of intervention programs for patients with increasingly complex problems. Functional activities across the lifespan also will be addressed. Open only to individuals enrolled in the Physical Therapy program. Credit 3 units.

**M02 PhysTher 625 Neurology Medicine**
Physician lectures will provide students with information on the medical management of patients with neurological conditions. Physicians will discuss medical diagnosis, clinical signs and symptoms, and management of selected conditions to prepare the student to use this information in Diagnosis and Management of Neuromuscular Conditions in PT. Open only to individuals enrolled in the Physical Therapy program. Credit 2 units.
M02 PhysTher 626 Moderators of Health, Wellness and Rehabilitation
Designed to explore individual attitudes toward health, illness, disability and death. Emphasizes the effect of these attitudes on individual goals, motivation, expectations, interpersonal relationships and exercise adherence. Investigates individual health attitudes, personal values, family interaction, stress management and concepts of wellness. Age-related issues will be addressed. Open only to individuals enrolled in the Physical Therapy program. Credit 3 units.

M02 PhysTher 627 Essential Clinical Skills II
Skill in providing interventions including massage and mobilization and the application of thermal, mechanical, hydro and electrotherapeutic modalities will be developed. Students will learn the basic indications for and prescription of adaptive equipment and wheelchairs. Open only to individuals enrolled in the Physical Therapy program. Credit 3 units.

M02 PhysTher 628 Case Integration Lab I
Paper, video and live patient cases provided by faculty and students will be completed to provide practice in managing patients with varying movement-related diagnoses of the cardiopulmonary and musculoskeletal systems. Open only to individuals enrolled in the Physical Therapy program. Credit 1 unit.

M02 PhysTher 629 Diagnosis and Management of Neuromuscular Conditions in PT I
Students will acquire the skills to examine patients with neuromuscular disorders. Emphasis will be on screening, selecting tests and measures, examination, determining impairments and functional loss, and making a movement system diagnosis. Students will practice examining both adult and pediatric patients. Content related to motor control and motor learning will be integrated into the course. Course content will be integrated with the concurrent Neurology Medicine course. Open only to individuals enrolled in the Physical Therapy program. Credit 2 units.

M02 PhysTher 630 Professional Issues and Skill Development III
Focuses on clinical application of compliance and motivation principles. Peer teaching, communication, consultation skills, leadership skills, lobbying legislation, documentation and negotiation in the clinic will be practiced. Students will practice decision making, supervision and delegation. Students will prepare resumes and begin career planning. Credit 3 units.

M02 PhysTher 631 Diagnosis and Management of General Medical Conditions in PT
Students will acquire the skills needed to manage movement-related problems in patients with diabetes, burns, arthritis, wounds, amputation and prosthetics, obesity, oncological problems, incontinence, pain, genetic conditions, osteoporosis, malnutrition, transplants and neonatology. Integration of information from previous and concurrent courses will be stressed with emphasis on screening, examination, analysis of findings, diagnosis, design and implementation of intervention programs for patients with increasingly complex problems. Functional activities across the life span will be addressed. Credit 3 units.

M02 PhysTher 632 Moderators of Health, Wellness and Rehabilitation
Students will acquire the skills needed to manage and prevent movement-related musculoskeletal problems of the spine, neck, elbow, wrist and hand, ankle and foot. Integration of information from previous and concurrent courses will be stressed with emphasis on screening, examination, analysis of findings, diagnosis, design and implementation of intervention programs for acute and post-acute patients with increasingly complex problems. Functional activities across the life span will be addressed. Credit 3 units.

M02 PhysTher 635 Professional Issues and Skill Development III
Students will build on their skills for examining patients with neuromuscular disorders and diagnosing movement system dysfunction. Additional skills acquired will be designing and implementing intervention plans to address impairments and functional loss in patients of all ages. To aid in selecting appropriate interventions, students will consider patient prognosis. Students will learn to prescribe wheelchairs and orthotics, fabricate splints, apply kinesiotape, and use a variety of medical equipment. Motor control and motor learning principles will be integrated into the course. Open only to individuals enrolled in the Physical Therapy program. Credit 4 units.

M02 PhysTher 636 Diagnosis and Management of General Medical Conditions in PT
Students will acquire the skills needed to manage movement-related problems in patients with diabetes, burns, arthritis, wounds, amputation and prosthetics, obesity, oncological problems, incontinence, pain, genetic conditions, osteoporosis, malnutrition, transplants and neonatology. Integration of information from previous and concurrent courses will be stressed with emphasis on screening, examination, analysis of findings, diagnosis, design and implementation of intervention programs for patients with increasingly complex problems. Functional activities across the life span will be addressed. Credit 3 units.

M02 PhysTher 638 Diagnosis and Management of Musculoskeletal Conditions in PT III
Students will acquire the skills needed to manage and prevent movement-related musculoskeletal problems of the spine, neck, elbow, wrist and hand, ankle and foot. Integration of information from previous and concurrent courses will be stressed with emphasis on screening, examination, analysis of findings, diagnosis, design and implementation of intervention programs for acute and post-acute patients with increasingly complex problems. Functional activities across the life span will be addressed. Credit 3 units.

M02 PhysTher 642 Case Integration Lab II
Students will use paper, computer, video and live patients to integrate information learned across the curriculum. Students will orally present cases they managed during Clinical Experience II. Credit 1 unit.

M02 PhysTher 643 Diagnosis and Management of Neuromuscular Conditions in PT II
Students will build on their skills for examining patients with neuromuscular disorders and diagnosing movement system dysfunction. Additional skills acquired will be designing and implementing intervention plans to address impairments and functional loss in patients of all ages. To aid in selecting appropriate interventions, students will consider patient prognosis. Students will learn to prescribe wheelchairs and orthotics, fabricate splints, apply kinesiotape, and use a variety of medical equipment. Motor control and motor learning principles will be integrated into the course. Open only to individuals enrolled in the Physical Therapy program. Credit 4 units.

M02 PhysTher 650 Diagnosis and Evidence Analysis in PT Practice III
Students will prepare written case reports based on patients seen during their clinical experiences. Students will defend use of diagnostic classifications and integrate the literature to support their case. Students will practice selecting appropriate outcome measures, designing clinical research questions, and use data to make decisions about individual and group treatment. Credit 3 units.

M02 PhysTher 651 Organizational and Management Issues
Dynamics of organizations and departments will be discussed using case examples. Focuses on the knowledge and skills needed by physical therapists early in their careers. Principles of administration and management that enable the physical therapist to supervise supportive personnel, to understand fiscal issues including reimbursement, and to recommend staffing schedules and patterns will be addressed. Students will learn marketing and public relations strategies. Credit 3 units.

M02 PhysTher 652 Alternative Settings and Practice Environments
Physical therapy practice in work and community settings will be addressed with an emphasis on ergonomics and group treatment. Special PT tests and the interpretation of other tests will be integrated into cases. Students will be introduced to care for the patient with vestibular problems, care in the ER, and an update in genetics/genomics. Alternative medicine and alternative PT practice will be studied. Students will explore recreational options for disabled populations. Credit 3 units.
M02 PhysTher 653 Health Fitness and Prevention
Emphasis will be on critiquing and designing fitness and wellness programs for well and special populations. Programs will focus on those for employee fitness, diabetes, arthritis, obesity and the elderly. Students will participate in and evaluate group treatments and recreational exercise. Use of exercise equipment will be addressed. Credit 3 units.

M02 PhysTher 654 Case Integration Lab III
A variety of teaching methods, including rounds format, assessment centers and student presentations will enable students to integrate information from across the curriculum to complete complex case studies. Emphasis will be on pharmacology, other tests, moderators, establishing time frames and setting priorities for care. Age-related issues will be addressed. Credit 3 units.

M02 PhysTher 655 Professional Issues and Skill Development IV
Focus will be on the professional skills students need to function in entry-level practice in a variety of settings. Students will study licensure, and will participate in lobbying and a mock House of Delegates. Skills in serving as an expert witness, a leader, a peer instructor and in clinical instruction will be developed. Students will be expected to participate in a service project and activities of the American Physical Therapy Association. Cultural and race issues will be actively explored. Credit 3 units.

M02 PhysTher 656 Clinical Experience I
An eight-week, full-time clinical experience supervised by clinical faculty. Allows the student to practice evaluation and treatment skills acquired in the classroom and laboratory. Also emphasizes development of professional behaviors. Credit 4 units.

M02 PhysTher 657 Clinical Experience II
An eight-week, full-time clinical experience supervised by clinical faculty. Allows the student to practice evaluation and treatment skills acquired in the classroom and laboratory. Also emphasizes development of professional behaviors. Credit 4 units.

M02 PhysTher 658 Clinical Experience III
A 12-week, full-time clinical experience supervised by clinical faculty. Allows the student to practice evaluation and treatment skills acquired in the classroom and laboratory. Also emphasizes development of professional behaviors. Credit 6 units.

M02 PhysTher 659 Clinical Experience IV
A 12-week, full-time clinical experience supervised by clinical faculty. Allows the student to practice evaluation and treatment skills acquired in the classroom and laboratory. Also emphasizes the development of professional behaviors. Credit 6 units.

M02 PhysTher 700 Learning, Health and Equity
Learners will explore the impact of health and equity on achieving our profession’s vision: “Transforming society by optimizing movement to improve the human experience.” Faculty will describe the learner-centered academic physical therapy learning environment, and learners will engage in partnership with faculty to form the foundation for their shared success. Learners will be guided to understand the importance and utility of competency-based physical therapist education, learning science principles, and both the stages and attributes of the master adaptive learner in professional formation and lifelong professional development. Credit 1 unit.

M02 PhysTher 701 Professions and Movement
Learners will gain an understanding of their roles as ethical professionals and movement system practitioners. Faculty will guide learners’ discovery of significant events in the history of the profession, with an emphasis on the concepts of movement and diagnosis. Faculty will introduce a model for integrating the movement system with health and movement across the lifespan. Learners will begin to develop skills in screening, interviewing, movement analysis, and clinical reasoning through case examples that will span the curriculum. Credit 1 unit.

M02 PhysTher 702 Movement and Population Health
Learners will integrate the foundations of movement and the movement system through a population health framework. The movement system practitioner’s role in health promotion and prevention will prepare the learner to promote health and prevent movement-related problems for populations, groups, and individuals across the lifespan. Learners will be guided in the understanding of social and structural systems, moving beyond the health care system, and how they impact the health of society and the individual. The learner will continue to develop the patient-client relationship and begin to demonstrate the communication skills necessary to work in interprofessional teams to promote health and prevent movement-related problems. Credit 2 units.

M02 PhysTher 703A Movement and Precision Health
Learners will focus on the role of the movement system practitioner in individual health. They will integrate the foundations of movement, the movement system, and foundations of movement-related conditions through a precision health framework that includes interactions across the spectrum of the environmental level to the cell molecular level. Learners will be guided in a basic understanding of the health care system and how it impacts the health of individuals. The learner will begin to prevent and manage movement-related problems for individuals across the lifespan while developing an understanding of their professional responsibilities in practice and how to identify areas for improvement in their practice. Credit 10 units.

M02 PhysTher 703B Movement and Precision Health
Learners will focus on the role of the movement system practitioner in individual health. They will integrate the foundations of movement, the movement system, and foundations of movement-related conditions through a precision health framework that includes interactions across the spectrum of environmental to cell molecular level. Learners will be guided in a basic understanding of the health care system and how it impacts the health of individuals. The learner will begin to prevent and manage movement-related problems for individuals across the lifespan, while developing an understanding of their professional responsibilities in practice and how to identify areas for improvement in their practice. Credit 15 units.
M02 PhysTher 710 Prevention, Diagnosis and Management of Movement-Related Problems
Learners will apply the foundations and moderators of movement in the prevention, diagnosis, and management of movement problems across the lifespan. An emphasis is placed on patient care and the impact of social, environmental, and health systems on patient/client management. Learners will begin to take on more responsibility for identifying and improving as a movement system practitioner to improve their practice, the profession, and the society the profession serves.
Credit 12 units.

M02 PhysTher 711 Prevention, Diagnosis and Management of Complex Movement-Related Problems
Learners will apply the foundations and moderators of movement in the prevention, diagnosis, and management of movement-related conditions across the lifespan with an increasing complexity. An emphasis continues on patient care and the impact of social, environmental, and health systems on patient/client management. Learners will take responsibility for identifying and improving as a movement system practitioner to improve their practice, the profession, and the society the profession serves.
Credit 12 units.

M02 PhysTher 731A Patient and Client Care 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to provide informed, effective, and efficient care for the management of movement-related health conditions and the promotion of health and wellness. The learner will choose topics organized through the clinician/scholar/educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 731B Patient and Client Care 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to provide informed, effective, and efficient care for the management of movement-related health conditions and the promotion of health and wellness. The learner will choose topics organized through the clinician/scholar/educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 732A Knowledge for Practice 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to integrate knowledge from established and evolving movement and other relevant biomedical, clinical, epidemiological and social-behavioral sciences to guide practice. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 732B Knowledge for Practice 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to integrate knowledge from established and evolving movement and other relevant biomedical, clinical, epidemiological and social-behavioral sciences to guide practice. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 733A Practice-Based Learning and Improvement 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to evaluate one’s delivery of care, appraise and assimilate scientific evidence, and continuously improve performance based on self-evaluation. The learner will choose topics organized through the clinician/scholar/educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 733B Practice-Based Learning and Improvement 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to evaluate one’s delivery of care, appraise and assimilate scientific evidence, and continuously improve performance based on self-evaluation. The learner will choose topics organized through the clinician/scholar/educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 734A Interpersonal & Communication Skills 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to use effective interpersonal and communication skills to interact and collaborate with others. The learner will choose topics organized through the clinician/scholar/educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 734B Interpersonal & Communication Skills 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to use effective interpersonal and communication skills to interact and collaborate with others. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 735A Professionalism 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to adhere to ethical and legal principles, model professional behaviors, and display a commitment to citizenship within the profession and the community. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 735B Professionalism 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to adhere to ethical and legal principles, model professional behaviors, and display a commitment to citizenship within the profession and the community. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 736A Systems-Based Practice 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to function effectively and proactively within evolving systems and environments that contribute to the health of individuals and populations. The learner will choose topics organized through the clinician/scholar/educator thread to improve in this domain, as needed.
Credit 0.5 units.
M02 PhysTher 736B Systems-Based Practice 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to function effectively and proactively within evolving systems and environments that contribute to the health of individuals and populations. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 737A Interprofessional Collaboration 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to engage within interprofessional teams as an effective member and collaborative leader. The learner will choose topics organized through the clinician/scholar/educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 737B Interprofessional Collaboration 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to engage within interprofessional teams as an effective member and collaborative leader. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 738A Personal & Professional Development 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to engage in lifelong personal and professional growth. The learner will choose topics organized through the clinician/scholar/educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 738B Personal & Professional Development 1
The learner will demonstrate a minimum of the level 1 benchmark in competency development to demonstrate the attributes required to engage in lifelong personal and professional growth. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 741A Patient and Client Care 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to provide informed, effective, and efficient care for the management of movement-related health conditions and the promotion of health and wellness. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 741B Patient and Client Care 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to provide informed, effective, and efficient care for the management of movement-related health conditions and the promotion of health and wellness. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 741C Patient and Client Care 2
The learner will demonstrate a minimum of the level 1 benchmark in competency development to provide informed, effective, and efficient care for the management of movement-related health conditions and the promotion of health and wellness. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 742A Knowledge for Practice 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to integrate knowledge from established and evolving movement and other relevant biomedical, clinical, epidemiological and social-behavioral sciences to guide practice. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 742B Knowledge for Practice 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to integrate knowledge from established and evolving movement and other relevant biomedical, clinical, epidemiological and social-behavioral sciences to guide practice. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 742C Knowledge for Practice 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to integrate knowledge from established and evolving movement and other relevant biomedical, clinical, epidemiological and social-behavioral sciences to guide practice. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 743A Practice-Based Learning and Improvement 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to evaluate one’s delivery of care, appraise and assimilate scientific evidence, and continuously improve performance based on self-evaluation. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 743B Practice-Based Learning and Improvement 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to evaluate one’s delivery of care, appraise and assimilate scientific evidence, and continuously improve performance based on self-evaluation. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.

M02 PhysTher 743C Practice-Based Learning and Improvement 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to evaluate one’s delivery of care, appraise and assimilate scientific evidence, and continuously improve performance based on self-evaluation. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.
Credit 0.5 units.
M02 PhysTher 744A Interpersonal & Communication Skills 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to use effective interpersonal and communication skills to interact and collaborate with others. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 744B Interpersonal & Communication Skills 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to use effective interpersonal and communication skills to interact and collaborate with others. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 744C Interpersonal & Communication Skills 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to use effective interpersonal and communication skills to interact and collaborate with others. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 745A Professionalism 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to adhere to ethical and legal principles, model professional behaviors, and display a commitment to citizenship within the profession and the community. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 745B Professionalism 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to adhere to ethical and legal principles, model professional behaviors, and display a commitment to citizenship within the profession and the community. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 745C Professionalism 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to adhere to ethical and legal principles, model professional behaviors, and display a commitment to citizenship within the profession and the community. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 746A Systems-Based Practice 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to function effectively and proactively within evolving systems and environments that contribute to the health of individuals and populations. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 746B Systems-Based Practice 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to function effectively and proactively within evolving systems and environments that contribute to the health of individuals and populations. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 746C Systems-Based Practice 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to function effectively and proactively within evolving systems and environments that contribute to the health of individuals and populations. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 747A Interprofessional Collaboration 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to engage within interprofessional teams as an effective member and collaborative leader. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 747B Interprofessional Collaboration 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to engage within interprofessional teams as an effective member and collaborative leader. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 747C Interprofessional Collaboration 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to engage within interprofessional teams as an effective member and collaborative leader. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 748A Personal & Professional Development 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to demonstrate the attributes required to engage in lifelong personal and professional growth. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.

M02 PhysTher 748B Personal & Professional Development 2
The learner will demonstrate a minimum of the level 2 benchmark in competency development to demonstrate the attributes required to engage in lifelong personal and professional growth. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed. Credit 0.5 units.
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<td>The learner will demonstrate a minimum of the level 2 benchmark in competency development to demonstrate the attributes required to engage in lifelong personal and professional growth. The learner will choose topics organized through the clinician, scholar, educator thread to improve in this domain, as needed.</td>
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<td>M02 PhysTher 751A</td>
<td>Patient and Client Care 3</td>
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<td>Knowledge for Practice 3</td>
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<td>Professionalism 3</td>
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