

PT 523 Lifespan-I Fall 2021

PT 523: LIFESPAN I (Fall 2021)

DESCRIPTION:

This course is designed to provide students with the knowledge and skills they need to provide care to pediatric populations. This course refines and allows for the theoretical understanding and clinical application of pediatric physical therapy examination, evaluation, diagnosis, prognosis, intervention, and outcomes.

CAPTE Standards & Elements:

Standard 7: Elements 7A, 7B, 7C, and 7D as appropriate based upon the age-appropriate patient case.

DEPARTMENT OFFERING THE COURSE AND INSTRUCTOR(S):

Physical Therapy

Credit Hours:

Three (3) credit hours

Instructor(s):

- Mohamed Elhamadany, PT, MS, DPT, PhD, PCS
701-777-3689. mohamed.elhamadany@und.edu
- Emily Henneman, PT, DPT
701-777-3673. emily.henneman@und.edu

CLOCK HOURS:

Lab/Lecture/Applications: Tuesday: 10:00 a.m. – 12 p.m. & 1– 3 p.m.; Friday: 1 – 3 p.m.

COURSE PREREQUISITES:

Registered in Professional Physical Therapy Curriculum.

COURSE OBJECTIVES:

Upon completion of this course, the student should be able to:

1. **Development of Human Movement System:** Analyze the development of movement skills and integrate knowledge of human development (motor, psychosocial, cognitive, and communication) with clinical decision making. Students will build upon concepts of normal development, motor control, and motor learning to address the physical therapy needs of children
2. **Age-appropriate patient/client management:** Demonstrate appropriate performance of developmental screening for growth and motor delays/impairments, parent or child interview/history with systems review, selection of appropriate test and measures and interpretation of findings, and development and implementation of appropriate, child/family centered, pediatric plans of care addressing interventions, adaptive equipment, orthoses, and supports.
3. **Family-centered Care:** Consistently collaborate with families in the patient/client management process, address family priorities and the role of the family under the

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Individuals with Disabilities Education Act, Parts B and C and other aspects of care, analyze the influence of the child with special needs on the family system and factors within the family system that influence the child's growth and development, and demonstrate effective education of others using culturally competent, lay terminology with children, families, and other non-medical professionals.

4. **Health Promotion and Safety:** Develop plans to promote age-appropriate health and wellness, make appropriate determination of the need for referrals to other health care professionals, and develop age-appropriate educational materials, using lay terminology, to address safety and environmental influences.
5. **Legislative, Policy, and Systems:** Demonstrate understanding of the characteristics of pediatric service provision in various pediatric settings, identify the required elements of IFSP and IEP and provide appropriate education on the tenants of IDEA, demonstrate the ability to write appropriate family centered IFSP goals and educationally relevant IEP goals, and demonstrate an understanding of requirements for mandatory reporting of suspected child abuse, neglect, and bullying.
6. **Evidence-based Practice:** Student will be able to describe/define selected pediatric conditions including but not limited to: Cerebral Palsy, Torticollis, Down syndrome, Myelodysplasia, Muscular Dystrophy, Spinal Muscular Atrophy, Common Genetic Disorders, Common Orthopedic Conditions, Common Cardiopulmonary conditions, Fitness and childhood obesity, Autism spectrum, and other...
 - Differentiating diagnosis
 - Differentiating prognosis
 - Determining the correct pediatric practice pattern from the APTA Guide to PT Treatment
 - Describe etiology, pathology, and signs/symptom
 - Justify clinical disposition
 - Describe, justify, determine role of PT in care

Course content and objectives have been designed to address the five essential core competencies for entry-level Doctor of Physical Therapy graduates as outlined in Rapport et al. Essential Competencies in entry-level pediatric physical therapy education. *Pediatr Phys Ther* 2014; 26:7-18.

The above objectives also contribute to the Practice Model Components of Foundational Science; Clinical Science, Professional Practice, and Patient/Client Care & Practice Management.

TEACHING METHODS AND LEARNING EXPERIENCES: A problem-oriented model which incorporates a variety of team activities is used throughout the course to guide critical inquiry, clinical decision-making and patient management for specific, common pediatric conditions. Lectures, laboratory application activities and experiential learning experiences in various community health fairs are also implemented to promote examination, evaluation, and intervention skills and planning

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Experiential Learning Experiences

The Department of Physical Therapy has multiple opportunities for students to participate in clinical practice activities under the supervision of UND faculty, all of whom are licensed physical therapists. During this particular course, you may be required to participate in the examination, evaluation, and physical therapy interventions of community members. You will be providing primary care to individuals with impairments and/or dysfunction during laboratory classes, community health fairs, pro bono clinics, and/or within traditional clinical practices.

METHODS OF EVALUATION:

Written Examinations
Practical Applications

Grading:

A	90% - 100%
B	80% - 89.9%
C	76% - 79.9%
Failure	75% or below

Assessment Implementation and Documentation:

Students will be required to participate actively in class and small group discussions and demonstrate competency in course content through:

- Quizzes up to 25%
- Midterm Exam up to 20%
- lab/class Activities/ Attendance /Participation up to 5%
- Prepare and orally present a case study portfolio up to 20%
- Comprehensive Final Exam up to 30%

Examinations:

Students are expected to pass written and laboratory examinations. Passing scores for written and laboratory exams are 76% and 80% respectively. Failure to successfully complete a practical examination will result in one retake examination to demonstrate proficiency. Inability to obtain a passing score on two attempts may result in failure of the course. See the UND-PT *Scholastic Standards* document for further reference.

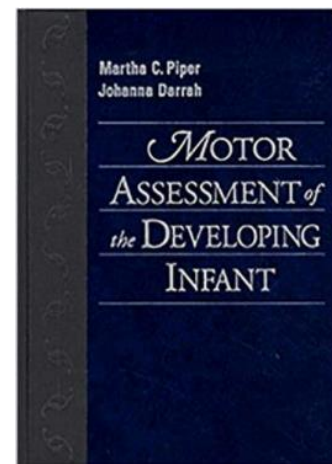
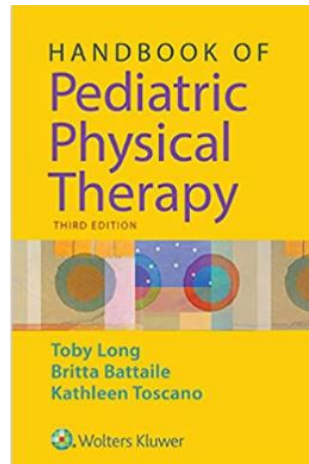
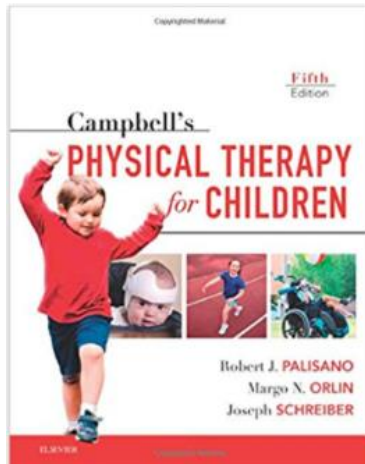
TEXTBOOK AND OTHER LEARNING RESOURCES:**Required Reading:**

- Palisano, RJ, Orlin. MN, Schreiber J. Campbell's Physical Therapy for Children (5th Ed) (Campbell's), Required
- Long T, Battaille B, Toscano K. Handbook of Pediatric Physical Therapy (3rd Ed), (Long's) Required

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Recommended Readings:

- Phipper, M. D., Darrah, J. Motor Assessment of the Developing Infant (AIMS), (Phipper's), Recommended



Additional reading assignments are made according to the assessment instruments utilized.

ATTENDANCE:

Class attendance is expected 100% of the time. Students must first attempt to notify the instructor by phone or in person for any absences. The student must also contact the instructor directly through e-mail or written documentation for any absences.

Make Up Work/Examinations:

Arrangements for make-up examinations must be made *by the student within three days* of the student's return to classes **for all absences. Students may be assigned additional coursework for all absences.** Students will not be allowed to make-up in-class quizzes/projects due to an absence.

ACADEMIC INTEGRITY:

In accordance with the rules concerning scholastic dishonesty in the *Code of Student Life** at the University of North Dakota, I affirm that I understand these rules and I agree to comply with them. I will not:

- receive any additional information or assistance for any exam other than what was provided during class or approved tutor sessions
- copy from another student's test
- collaborate with or seek aid from another student who may have previously taken the exam
- knowingly use, buy, sell, steal, or solicit in whole or in part the contents of any exam
- bribe another person to obtain information about any exam

DISABILITY ACCESS STATEMENT:

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Contact me, FACULTY (office 777-3689, email mohamed.elhamadany@med.und.edu, or visit Rm E-34X UND SMHS) to request disability accommodations, discuss medical information, or plan for an emergency evacuation. To get confidential guidance and support for disability accommodation requests, students are expected to register with DSS at www.UND.edu/disability-services/, 180 McCannel Hall, or 701.777.3425.

NOTICE OF NONDISCRIMINATION: It is the policy of the University of North Dakota that no person shall be discriminated against because of race, religion, age, color, gender, disability, national origin, creed, sexual orientation, gender identity, genetic information, marital status, veteran's status, or political belief or affiliation and the equal opportunity and access to facilities shall be available to all. Concerns regarding Title IX, Title VI, Title VII, ADA, and Section 504 may be addressed to Donna Smith, Director of Equal Employment Opportunity/Affirmative Action and Title IX Coordinator, 401 Twamley Hall, 701.777.420181, und.affirmativeactionoffice@UND.edu or the Office for Civil Rights, U.S. Dept. of Education, 500 West Madison, Suite 1475, Chicago, IL 60611 or any other federal agency.

REPORTING SEXUAL VIOLENCE: If you or a friend has experienced sexual violence, such as sexual assault, domestic violence, dating violence or stalking, or sex-based harassment, please contact UND's Title IX Coordinator, Donna Smith, for assistance: 701.777.420181; donna.smith@UND.edu or go to UND.edu/affirmative-action/title-ix.

FACULTY REPORTING OBLIGATIONS REGARDING SEXUAL VIOLENCE: It is important for students to understand that faculty are required to share with UND's Title IX Coordinator any incidents of sexual violence they become aware of, even if those incidents occurred in the past or are disclosed as part of a class assignment. This does not mean an investigation will occur if the student does not want that, but it does allow UND to provide resources to help the student continue to be successful at UND. If you have been the victim of sexual violence, you can find information about confidential support services at UND.edu/affirmative-action/title-ix.

OMBUDS OFFICE: "It is not our differences that divide us. It is our inability to recognize, accept, and celebrate those differences" (Audre Lorde). Before your differences with others become difficult and costly conflicts or formal grievances, in both seen and unseen ways, talk with the Ombuds Office in an informal, identity-protecting, impartial, and independent space. 314 Cambridge St Room 201. 701.777.6239. www.UND.edu/ombuds.

UND CARES RESPONSE TEAM: The [UND Cares Response Team](#) is available to assist with incidents involving UND students 24 hours a day, seven days a week. They respond to incidents such as major accidents, missing students, sickness that interferes with attending classes, death, suicidal ideations, situations involving self-harm, psychological trauma and sexual violence. Contact directly at 701.777.2664 during regular business hours OR 701.777.3491 after hours. *If problems occur, students are required to work through channels of communication to resolve the problem before going to the chair or dean. The channel is student, instructor,*

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chair, associate dean health sciences, and dean. rev 2/06, 5/06, 5/07, 4/08, 5/09, 5/10, 5/11, 8/13, 8/14, 8/15, 8/16, 11/18

COVID-19 SPECIAL STATEMENT:

All members of the University community have a role in creating and maintaining a COVID-19 resilient campus. There are several expectations from the School of Medicine and Health Sciences that require compliance, including: Wear face coverings during interactions with others and in the classroom; Wash hands often and use hand sanitizer; Properly clean spaces; and, if you are experiencing any symptoms, Stay home and call your health care provider. Students who fail to comply with any of the COVID related requirements will not be permitted in the classroom and may be subject to disciplinary action. We encourage all members of the University community to model positive behavior both on- and off-campus. Any changes in the SMHS COVID related requirements will be communicated to you through the Friday weekly email "For your health" from the Dean's office and email from the program director or chair.

Students who test positive for COVID-19 are expected to immediately self-isolate/quarantine. If you have tested positive for COVID-19 we strongly recommend that you report the information to the Office of Student Rights and Responsibilities at 701.777.2664 or online at <https://veoci.com/veoci/p/w/ss2x4cq9238u>. Doing so will ensure students have the support they need to continue with their academic goals and to protect others. The policy related to COVID-19 may change throughout the semester due to community spread and updated CDC guidelines. Please check the policy frequently and ask faculty if you have any questions.

OUTLINE OF CONTENT AND ASSIGNED INSTRUCTOR: See attached course schedule

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Tuesday Class: 10 a.m. – 12 p.m.

Tuesday & Friday Split Lab (Lab days Switch on 9/28/2021)

- 1st Lab, Team 1-5, Tuesday (1 p.m. – 3 p.m.) - 2nd Lab, Team 6-10, Friday (1 p.m. – 3 p.m.)

Weeks	TOPIC & ASSIGNMENT		
MODULE #1: PEDIATRIC PT TOOLKIT			
Week 1	<ul style="list-style-type: none"> - Motor development theories (Pipper's) - Movement System Development (0-12m) (Long's Ch.1) 	Aug. 24, W202 No Lab	ME, EH
Week 2	<ul style="list-style-type: none"> - Movement System Development (1-5yrs) (Long's Ch.1) - Gait development (Campbell's Ch.34) <p>Lab: - Constraints to Movement System Development - Assessment of Reflexes</p>	Aug. 31, W202 Aug.31 & Sep.3, E312	ME, EH
Week 3 <i>Sep. 6 Labor Day</i>	<ul style="list-style-type: none"> - Foundations of Pediatric Examination/Parent Interview - Screening for Functional and Motor Abilities - QUIZ #1 cover module 1 <p>Patient Portfolio - Topic1: Group Submission Due Sep. 7</p> <p>Lab: Screening for Functional and Motor Abilities: - AIMS (Pipper's); PDMS; HELP</p>	Sep. 7, W202 Sep.7&10, E312	JB
MODULE #2: PEDIATRIC NEUROLOGY			
Week 4	<p>Cerebral Palsy- Background Information (Campbell's Ch.19):</p> <ul style="list-style-type: none"> - Etiology, Classification, and Examination, - GMFCS - QUIZ #2 <p>Patient Portfolio - Topic1: Individual responses Due Sep. 14</p> <p>Lab: EXPERIENTIAL LEARNING EXPERIENCES I (site visit to GF daycares)</p>	Sep. 14, W202 Sep.14&17	ME, EH
Week 5	<p>Cerebral Palsy-Foreground information (Campbell's Ch.19):</p> <ul style="list-style-type: none"> - Diagnosis, Prognosis, and Intervention - Case Scenario, Applications - QUIZ #3 <p>Patient Portfolio - Topic 2: Group Submission Due Sep. 21</p> <p>Lab: PT Interventions for Children with Neurological Disorders: Prone Development</p>	Sep. 21, W202 Sep.21&24, E312	ME, EH EH out on 9/24
Week 6	<p>Neurological conditions:</p> <ul style="list-style-type: none"> - Myelodysplasia (Campbell's Ch.23) - Perinatal Brachial Plexus Injury (PBPI) (Campbell's Ch.20) - QUIZ #4 <p>Patient Portfolio - Topic 2: Individual responses Due Sep. 28</p> <p>Lab: PT Interventions for Children with Neurological Disorders: Supine & sitting Development</p>	Sep. 28, W202 Sep.28 & Oct. 1 (12:30-2:30), E312 Deeded Body Program Interment Service starting at 2:30PM.	ME, EH

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Week 7	<p>Neurological conditions:</p> <ul style="list-style-type: none"> - SCI (Campbell's Ch.21) - TBI (Campbell's Ch.22) - QUIZ #5 <p>Patient Portfolio - Topic 3: Group Submission Due Oct. 5</p> <p>Midterm Exam (Oct 8, 1-3 pm for the whole class)</p>	<p>Oct. 5, E221</p> <p>Oct. 8, E312</p>	<p>EH, ME</p>
MODULE #3: PEDIATRIC ORTHOPEDIC			
Week 8	<ul style="list-style-type: none"> - Musculoskeletal development & adaptation (Campbell's Ch.5): - Torsional profile (Campbell's Ch.14) & DDH - Common pediatric deformities (Campbell's Ch.14) - QUIZ #6 <p>Patient Portfolio - Topic 3: Individual responses Due Oct. 12</p> <p>Lab: PT Examination for Children with Orthopedic conditions</p> <ul style="list-style-type: none"> - Torsional profile lab - Orthotics: Applications, discussion 	<p>Oct. 12, W202</p> <p>Oct. 12&15, E312</p>	<p>ME, EH</p>
Week 9	<p>Orthopedic Conditions -I Campbell's Ch.14):</p> <ul style="list-style-type: none"> - DDH - Blount's Disease - Causes of Pain & Limp in Growing Skelton - QUIZ #7 <p>Lab: EXPERIENTIAL LEARNING EXPERIENCES II: Assistive Technology (Altru Rehabilitation Center) (No lab on Friday Oct. 22)</p>	<p>Oct. 19, W202</p> <p>Oct. 19</p> <p>Teams 6 – 10: (5:30 -6:30 p.m.), Teams 1 – 5: (6:30 -7:30 p.m.)</p>	<p>ME, EH</p> <p>LO</p> <p>EH out</p>
Week 10	<p>Orthopedic Conditions -II:</p> <ul style="list-style-type: none"> - JIA; AMC; OI (Campbell's Ch.7, 10, 11) - Sports-related injury in children (Campbell's Ch.15) - QUIZ #8 <p>Lab: PT Interventions for Children with Neurological Disorders: Standing & Walking Dev.</p>	<p>Oct. 26, W202</p> <p>Oct. 26&29, E312</p>	<p>ME, EH</p>
Week 11	<p>Orthopedic Conditions -III:</p> <ul style="list-style-type: none"> - Muscular Dystrophies and Spinal Muscular Atrophy (Campbell's Ch.12) - Congenital Muscular Torticollis (CMT) & Cranial deformation (Campbell's Ch.9) - QUIZ #9 	<p>Nov. 2, W202</p>	<p>ME, EH</p> <p>LO</p>
MODULE #4: PEDIATRIC CARDIOPULMONARY & NICU			
	<ul style="list-style-type: none"> - Asthma (Campbell's Ch.27) - CF (Campbell's Ch.26) <p>Patient Portfolio - Topic 4: Group Submission Due Nov. 5</p>	<p>Nov. 5, W202</p> <p>The whole class</p>	<p>EH, ME</p>

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<p>Week 12 Nov.11 Veteran's Day</p>	<ul style="list-style-type: none"> - Introduction to NICU - Infant and toddler vitals - Congenital heart Conditions (Campbell's Ch.28) - QUIZ #10: cover module 4 	<p>Nov. 9, W202</p>	<p>EH, ME</p>
	<p>Children with Multiple Disabilities</p> <ul style="list-style-type: none"> - Integrated Case Studies <p>Patient Portfolio - Topic 4: Individual responses Due Nov 12</p>	<p>Nov.12, W202 The whole class</p>	<p>ME, EH</p>
<p>Week 13</p>	<p>MODULE #5: FOUNDATIONS OF GENETIC DISORDERS & ASD</p>		
	<ul style="list-style-type: none"> - Foundations of Genetic Disorders - Down Syndrome (DS) - Autism spectrum disorder (ASD) (Campbell's Ch.24) - Application: DS, ASD Case studies - QUIZ #11: cover module 5 <p>Lab: EXPERIENTIAL LEARNING EXPERIENCES III: Site visit GF Pediatric Settings</p>	<p>Nov. 16, W202 Friday Nov. 19, 8 am – 12pm for the whole class</p>	<p>ME, EH, JB</p>
<p>Week 14</p>	<p>MODULE #6: FOUNDATIONS OF LEGISLATIVE MANDATES</p>		
	<ul style="list-style-type: none"> - Educational Environment / IDEA PART B (Campbell's Ch.31) - Early Intervention/ IDEA PART C (Campbell's Ch.30) - Applications: case studies from school environment & EI - QUIZ #12: cover module 6 <p>Patient Portfolio - Topic 5: Group Submission Due Nov 23</p> <p>Thanksgiving Break Nov 24-26- No lab</p>	<p>Nov. 23, W202</p>	<p>ME, EH</p>
<p>Week 15</p>	<p>PATIENT PORTFOLIO: Students Presentation</p>		
	<p>15-minutes presentation on students' patient-portfolio to the class Team 1-5</p> <p>Patient Portfolio - Topic 5: Individual responses Due Nov 30</p>	<p>Nov. 30, W202</p>	<p>ME, EH</p>
	<p>15-minutes presentation on students' patient-portfolio to the class Team 6-10</p>	<p>Dec 3, W202 The whole class</p>	<p>ME, EH</p>
<p>Week 16</p>	<p>Finals Week</p>		

** Please note experiential learning experiences are subject to change due to inclement weather and or facilities needing to cancel the site visit. You will be notified of change ASAP.