

**PT 538 - Advanced Topics in Pediatrics****COURSE DESCRIPTION:**

This course is designed to provide a level of greater expertise and a more comprehensive understanding of pediatric physical therapy practice. The content is presented with problem-oriented model and active learning approaches to prepare the students to (a) understand the priority content concepts, (b) use critical thinking and problem solving in the application of the content to clinical case studies, (c) demonstrate team skills required in professional practice and (d) design therapeutic plans of care for pediatric clients. Using case studies, students will apply the course concepts and use evidence-based, clinical decision-making strategies to design appropriate plans of care for pediatric clients affected by disabling conditions.

**DEPARTMENT OFFERING THE COURSE AND INSTRUCTOR(S):**

Physical Therapy

**Credit Hours:**

Three (3) credit hours

**Instructors**

- Mohamed Elhamadany, PT, DPT, PhD, MS, PCS  
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- Emily Henneman, PT, DPT  
701-777-3673. [emily.henneman@und.edu](mailto:emily.henneman@und.edu)

**CLOCK HOURS:**

The course is a hybrid course combining:

- Lab/Lecture/Applications classes: Tuesday 1pm – 3pm
- Experiential learning experiences: Wednesday/Friday 8 am -12pm

**COURSE PREREQUISITES:**

Registered in Professional Physical Therapy curriculum

**COURSE OBJECTIVES:**

At the completion of the course each student will be able to:

**Age-appropriate patient/client management and Evidence-based Practice:**

1. Demonstrate appropriate selection and administration of pediatric examination instruments to evaluate motor and functional skills and creation of professional documentation of examination findings.
2. Demonstrate competence in the analysis, interpretation, and integration of data resulting from examination procedures and instruments in the creation of pediatric plans of care.
3. Demonstrate foundational knowledge of common conditions that affect children, use research-based clinical decision-making skills in the application of this knowledge in the creation of plans of care; subsequent evaluation of outcomes and synthesis of information in the adaptation of plans of care appropriately throughout episodes of care.

Family-centered Care & Legislative, Policy, and Systems:

4. Demonstrate the ability to create plans of care which are compliant with federal, state and institutional legal practice standards related to patient/client care and fiscal management and including service provision to children and families under an Individualized Education Plan (IEP), Individualized Family Service Plan (IFSP), or Section 504 Plan.
5. Demonstrate the ability to adapt examination and intervention procedures to accommodate for individuals with diversity, using culturally competent and appropriate communication skills and professional behavior in communication with patients/clients, families, interdisciplinary team members, payers and policy makers.
6. Demonstrate the ability to design appropriate interventions to be implemented in the child/family's natural environments to achieve goals and outcomes for functional training in self-care and home management.

Health Promotion and Safety:

7. Analyze client health data and environmental influences and design appropriate referrals to other health care professionals, and create educational materials, using lay terminology, to address health status, safety, and environmental influences.

**OUTLINE OF CONTENT AND ASSIGNED INSTRUCTOR:**

See attached course schedule.

**TEACHING METHODS AND LEARNING EXPERIENCES:**

This course provides students with an opportunity to integrate knowledge and skills when discussing clinical patients, and further develop their clinical decision-making skills for the pediatric client. This course will combine lecture, small group discussion, lab, and case-studies to optimize student learning. Intervention planning and adaptation based on client status and desired intervention outcomes will be incorporated in the course materials. Practical experiences in the administration of pediatric instruments will be completed independently.

Please Note: The content of this course primarily partially fulfills the Patient Care: Screening, Evaluation, Progression and Discharge Component of the UND Physical Therapy Practice Model and secondarily contributes to Communication and Clinical Practice Components.

**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:

- Administration of pediatric instruments up to 10%
- Quizzes up to 15%
- Clinical Cases and Assignments up to 20%
- Midterm Exam up to 15%
- Final Written Exam up to 25%
- Practical Exam up to 15%

**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, Battaile B, Toscano K. Handbook of Pediatric Physical Therapy (3th Ed), (Long's) Required

*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:

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

**DISABILITY ACCESS STATEMENT:**

Contact me, FACULTY (office 777-3689, email [mohamed.elhamadany@und.edu](mailto:mohamed.elhamadany@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/](http://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](mailto: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](mailto:donna.smith@UND.edu) or go to [UND.edu/affirmative-action/title-ix](http://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](http://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](http://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, 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 INFORMATION:** All members of the University community have a role in creating and maintaining a COVID-19 resilient campus. There are several expectations that all community members, including students, are asked to follow for the safety of all: maintain physical distancing of at least 6 feet while in UND facilities, wear face coverings during interactions with others and in the classroom, wash their hands often and use hand sanitizer, properly clean spaces that they utilize, and if experiencing any symptoms, stay home and call their health care provider. Students electing not 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 choose to model positive behavior both on- and off-campus. Information regarding the pandemic and UND's efforts to create a COVID resilient campus is available on the COVID-19 blog (<http://blogs.und.edu/coronavirus/>). Please subscribe to stay up to date on COVID related information. Students who test positive for COVID-19 or are identified as a close contact are expected to immediately self-isolate/quarantine. If you have tested positive for COVID19 or have been placed in quarantine due to being identified as a close contact or travel 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.

Weeks	TOPIC	Assignment
<b>Week 1</b>	<b>Pediatric Examination/Evaluation</b>	
Tue. May 25 <sup>th</sup> Room E311	- Introduction & Orientation to the Course - Pediatric Examination/Evaluation <b>Lab:</b> - Parent/Caregiver interview - GMFM, PDMS2	Complete the GMFM & PDMS2 documentation– due June 1 <sup>st</sup>
Wed. May 26 <sup>th</sup>	Experiential learning experiences: Team 2 &3	
Fri. May 28 <sup>th</sup>	Experiential learning experiences Team 1 & 4	
<b>Week 2</b>	<b>Pediatric Examination/Evaluation</b>	
Tue. June 1 <sup>st</sup> Room E311	- Child Protection: Reporting suspected cases of abuse <b>Lab:</b> - BOT2, HELP, PEDI	Complete the BOT2 documentation– due June 8 <sup>th</sup>
Wed. June 2 <sup>nd</sup>	Experiential learning experiences: Team 1, 2 &4	
Fri. June 4 <sup>th</sup>	Experiential learning experiences Team 3	
<b>Week 3</b>	<b>NICU &amp; DCD Group C&amp;D</b>	
Tue. June 8 <sup>th</sup> Room E311 1pm-4pm	- Neonatal Physical Therapy Practice - Case Application - DCD - Case Application - Quiz #1 <b>Lab:</b> - Pediatric Intervention Approaches: NDT	<i>Clinical CASE STUDY-1</i> – due June 15 <sup>th</sup> for Group C&D
Wed. June 9 <sup>th</sup>	Experiential learning experiences: Team 3	
<b>Week 4</b>	<b>NICU &amp; DCD Group A&amp;B</b>	
Tue. June 15 <sup>th</sup> Room E311 1pm-4pm	Neonatal Physical Therapy Practice - Case Application - DCD - Case Application - Quiz #1 <b>Lab:</b> - Pediatric Intervention Approaches: NDT	<i>Clinical CASE STUDY-1</i> – due June 22 <sup>nd</sup> for Group A&B
Wed. June 16 <sup>th</sup>	Experiential learning experiences: Team 2 &4	
Fri. June 18 <sup>th</sup>	Experiential learning experiences Team 1	
<b>Week 5</b>	<b>Foundations of Pediatric Oncology</b>	
Tue. June 22 <sup>nd</sup> Room E311	- Pediatric Oncology - Case Application - Quiz #2 <b>Lab:</b> - Intervention Approaches: Pediatric Strengthening Program	<i>Clinical CASE STUDY-2</i> – due June 29 <sup>th</sup>
Wed. June 23 <sup>rd</sup>	Experiential learning experiences: Team 1, 2, 3&4	

Fri. June 25 <sup>th</sup>	Score builders	
<b>Week 6</b>	<b>Limb Deficiencies &amp; Amputations</b>	
Tue. June 29 <sup>th</sup> Room E311	<ul style="list-style-type: none"> <li>- Limb Deficiencies &amp; Amputations</li> <li>- Case Application</li> <li>- Quiz #3</li> </ul> <p><b>Lab:</b> - Intervention Approaches: Lower-Extremity Prosthetics, Orthotics &amp; Assistive Technology</p>	<i>Clinical CASE STUDY-3</i> – due July 6 <sup>th</sup>
Wed. June 30 <sup>th</sup>	Experiential learning experiences: Team 1, 2 & 3	
Fri. July 2 <sup>nd</sup>	Experiential learning experiences Team 4	
<b>Week 7</b>	<b>Genetic disorders</b>	
Tue. July 6 <sup>th</sup> Room E311 1pm-4pm	<ul style="list-style-type: none"> <li>- Common Genetic Disorders</li> <li>- Case Application</li> <li>- Quiz #4</li> </ul> <p><b>Lab:</b> - Intervention Approaches: Task-oriented training; Sensory integration approach</p>	<i>Clinical CASE STUDY-4</i> – due July 11 <sup>th</sup>
Wed. July 7 <sup>th</sup>	Experiential learning experiences: Team 1, 3 & 4	
Fri. July 9 <sup>th</sup>	Experiential learning experiences Team 2	
<b>Final Week</b>	<b>Final Practical Exam:</b> Tuesday July 13 <sup>th</sup>	
	<b>Final Written Exam:</b> Tuesday July 13 <sup>th</sup>	