

**University of Nevada, Las Vegas
School of Allied Health Sciences
Department of Physical Therapy**

<u>Course Number:</u>	DPT 759
<u>Course Title:</u>	Pediatric Rehabilitation
<u>Credit Hours:</u>	2
<u>Lecture Hours:</u>	2 hours/week
<u>Weekly Schedule:</u>	Thursday, 9am to 11am or as scheduled
<u>Location:</u>	BHS 213
<u>Instructor(s):</u>	Robbin Hickman, PT, DSc, PCS Office hours: Office location: BHS 318 Office telephone: 702-895-1055 Email: robbin.hickman@unlv.edu
<u>Graduate Assistant(s):</u>	N/A

Course Description:

Provides foundational knowledge of development (typical and atypical) and an overview of pediatric physical therapy practice for children with atypical development. Presents examination, evaluation, and development of physical therapy plans of care for children with various disabilities within the frameworks of family-centered care and disablement/enablement models.

Course Objectives:

The following objectives are aligned with curriculum content from the Commission on Accreditation in Physical Therapy Education (Evaluative Criteria of PT Programs-updated 11/2012), the APTA Minimum Required Skills of Physical Therapist Graduates at Entry-Level core document content (updated 10/1/27013), and the Normative Model of Physical Therapist Professional Education: Version 2004.

Additionally, this course has been designed to be consistent with the following guidelines and recommendations:

- APTA Neurology Section: Neurologic Entry-Level Curricular Content Integrated with a Normative Model of Physical Therapist Professional Education

- Evidence-Based Practice Special Interest Group, Section on Research, American Physical Therapy Association, Doctor of Physical Therapy Education Evidence-Based Practice Curriculum Guidelines
- APTA's Section on Pediatrics: Essential Competencies in Entry-Level Pediatric Physical Therapy Education.

At the completion of the course the student are expected to:

1. **Focus on human development**—includes all domains of development, but with an additional emphasis on motor development, especially at key transition points throughout the lifespan.
 - a. Integrate knowledge of human development across all domains and at lifespan transition points with clinical decision-making.
 - b. Analyze the development of movement skills across the lifespan.
 - c. Apply knowledge of psychosocial, cognitive, and communication developmental level to effectively
 - i. Compare and contrast theories of development, with emphasis on motor development
 - d. Interact with individuals across the lifespan.
2. **Focus on age-appropriate patient/client management**— effective application of the patient/client management model to children and their families
 - a. Perform developmental screening for the identification of potential growth and motor delay/impairments.
 - b. Conduct an appropriate interview/history with the child and/or parent (including systems review).
 - c. Gather information on the child's play/recreation/preferred activities, participation, educational setting/level, and family unit.
 - d. Select appropriate tests and measures on the basis of the child's age, interview/history and systems review, and setting.
 - e. Conduct appropriate tests and measures and gather data—in most cases, this will minimally include gait/mobility, postural control, motor development, pain, range of motion, muscle performance (strength), sensation, self-care, physical fitness, and activity endurance.
 - f. Interpret examination findings to determine impairments in body structure and function, activity limitations, and participation restrictions.
 - g. Develop an age-appropriate and developmentally appropriate plan of care to address participation restrictions/activity limitations/impairments of body structure and function.
 - h. Solicit input on goals and service delivery from parents/primary care providers and from the child when appropriate (on the basis of age, communication, and cognitive ability).
 - i. Select age-appropriate and developmentally appropriate procedural interventions including play/recreational activities, natural environment, toys, and equipment.

- j. Implement age-appropriate and developmentally appropriate procedural interventions including play/recreational activities, natural environment, toys, and equipment.
3. **Focus on family-centered care for all patient/client and family interactions**—key characteristics: positivity, responsive, collaborative, sensitive
 - a. Consistently collaborate with families throughout the patient/client management process in all settings where intervention is provided.
 - b. Address family priorities in the plan of care.
 - c. Identify the role of the family in all aspects of care under the Individuals with Disabilities Education Act (IDEA), Parts B and C.
 - d. Understand the focus on the family’s needs in the Individualized Family Service Plan (IFSP) and the focus on the child’s needs in the Individualized Educational Program (IEP).
 - e. Describe the influence of a child with special needs on the family system.
 - f. Describe the factors of the family system that influence the development of the child.
 4. **Focus on health promotion and safety**—specific considerations for child vulnerability include environmental factors, age-specific safety, screening of healthy populations, fitness and health promotion, and recreation.
 - a. Determine the need for referral to other health care professionals.
 - b. Develop a plan to address age-appropriate health and wellness for all children, including those who are typically developing and those with special needs.
 - c. Educate caregivers about age-specific and developmentally appropriate environmental safety considerations.
 5. **Focus on legislation, policy, and systems**—related to environmental factors of the ICF, IDEA, state and federal regulations, and mandatory reporting of child abuse and neglect.
 - a. Understand requirements related to mandatory reporting of suspected child abuse and neglect in one’s state.
 - b. Discuss the major tenets of IDEA; know how to access and share information about IDEA, Medicaid, and other public programs related to care for children.
 - c. Identify the required elements of an IFSP and IEP and work with the team to write appropriate family-focused IFSP goals and educationally relevant IEP goals.
 - d. Describe appropriate care settings available to extend pediatric rehabilitation services.
 6. **Focus on: commonly encountered health conditions encountered by physical therapists serving pediatric clients and their families** by addressing all areas of patient client management including:
 - a. Autism spectrum disorder
 - b. Brachial plexus injury
 - c. Cerebral palsy

- d. Congenital limb deficiencies
 - e. Cystic fibrosis
 - f. Developmental coordination disorder
 - g. Developmental delay (includes infants “at-risk” for delay)
 - h. Down syndrome
 - i. Muscular dystrophy
 - j. Myelomeningocele (with or without hydrocephalus)
 - k. Torticollis (with or without plagiocephaly)
7. **Focus on the role of the physical therapist in serving pediatric clients and their families.**
- a. Discuss the role of the physical therapist in different pediatric practice settings
 - b. Discuss the role of teamwork with other healthcare providers in the child with pathology

Course Structure:

This course will build on material presented in foundational clinical and scientific coursework. Students will gain an understanding of contemporary, family-centered principles of care, pediatric movement science, developmental theory and patterns, and pediatric service delivery paradigms. Students will apply these general principles to children with a variety of motor difficulties including developmental delay and disability as well as selected medical diagnoses.

Evaluation Methods:

1. Quizzes

There will be 3 written, closed-book quizzes that will include 20 questions each. Students will have 30 minutes to complete each quiz. All quizzes will cover all readings, lecture, and lab materials for the designated period. Quizzes 2 and 3 will be comprehensive, meaning they will cover review material from earlier in the course. Each quiz is worth 20 points. If any student does not or cannot take a quiz due to an emergency, then plans must be made at the discretion of the professor to complete the quiz within a specified time period. Please see course schedule for quiz dates.

2. Final examination.

There will be one closed-book final examination that will be comprehensive, covering all readings, lecture, and lab materials for the entire course. This exam will be worth 80 points, or half of the course grade. Both examinations will include material from the readings and lab experiences in addition to lecture material presented. If any student does not or cannot take the examination due to an emergency, then plans must be made at the discretion of the professor to complete the exam within a specified time period. Please see final exam schedule for date, time, and location of final exam.

3. Mock assessment worksheet.

Instructors for the concurrent lab course will conduct a model assessment of a child for students to observe. Students will reflect on their observations and turn in a worksheet

that will be worth 20 points (=1 quiz). Please see worksheet for details and course schedule for due date.

4. Health promotion and wellness assignment. (Optional)

This assignment is optional. Students who elect to complete this assignment may substitute points earned on this assignment for points earned on 1 quiz for this course. Students will gather and evaluate evidence regarding a health promotion and wellness topic such as childhood obesity, home safety, injury prevention, etc. They will then either prepare talking points for a community presentation or a checklist can be given to families. This assignment will be worth 20 points, the equivalent of 1 quiz. Details of this assignment and grading rubric will be available on WebCampus.

5. Extra Credit Opportunities

Students will have an opportunity to earn up to 3.2 points of extra credit in optional extra assignments. Please see Web Campus for details of these opportunities.

6. Grading

The final course grade is a letter grade. The course grade will be based on the following:

Assignment	Points value per item	Total possible points that category
Quizzes 1, 2, and 3	20	60
Model assessment report	20	20
Final examination	80	80
Total	--	160
Optional extra credit	3.2	3.2

Numeric and Letter Grade Translation (no rounding!)

A	93-100	B-	80-82
A-	90-92	C+	77-79
B+	87-89	C	73-76
B	83-86	F	<73

Instructional Practices:

1. Teaching Methods
 - a. In class lecture
 - b. Class discussion
 - c. Application exercises using cases and professional literature
 - d. Student self-study
 - e. Online instruction via WebCampus
 - f. Podcasts

2. Teaching Aids
 - a. White board
 - b. Presentation software

- c. Video
- d. Handouts
- e. WebCampus

3. Expectations and Student Responsibilities

- a. All students are expected to arrive in class on time in appropriate attire and prepared for each day's topics of discussion.
- b. All students are expected to participate in class activities and discussions, including group activities (see policy below re: mobile devices).
- c. All students are expected to check WebCampus at least weekly for communications
- d. Each student is expected to act according to the guidelines of Professional Abilities set forth in the Department of Physical Therapy Student Manual.
- e. No student may record class sessions (audio, video, photograph) without explicit permission from instructor (see policy below re: covert video or audio recording).

4. Course Policies

- a. For general Course Policies see the Department of Physical Therapy Student Manual.
- b. Academic Misconduct – Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the Student Academic Misconduct Policy (approved December 9, 2005) located at:
<http://studentconduct.unlv.edu/misconduct/policy.html>.
- c. Copyright – The University requires all members of the University Community to familiarize themselves and to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at:
<http://provost.unlv.edu/copyright/statements.html>.
- d. Disability Resource Center (DRC) – The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-985-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to me during office hours so that we may work together to develop strategies for implementing the accommodations to meet both

your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach me before or after class to discuss your accommodation needs.

- e. Religious Holidays Policy – Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor no later than the end of the first two weeks of classes of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. This policy shall not apply in the event that administering the test or examination at an alternate time would impose an undue hardship on the instructor or the university that could not reasonably be avoided. For additional information, please visit: <http://catalog.unlv.edu/content.php?catoid=4&navoid=164>.
- f. Tutoring – The Academic Success Center (ASC) provides tutoring and academic assistance for all UNLV students taking UNLV courses. Students are encouraged to stop by the ASC to learn more about subjects offered, tutoring times and other academic resources. The ASC is located across from the Student Services Complex (SSC). Students may learn more about tutoring services by calling (702) 895-3177 or visiting the tutoring web site at: <http://academicsuccess.unlv.edu/tutoring/>.
- g. Rebelmail – By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students' e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu.
- h. Library Resources – Students may consult with a librarian (www.library.unlv.edu/consultation) about research needs. For this class, the subject librarian is Xan Goodman. UNLV Libraries provides resources to support students' access to information. Discovery, access, and use of information are vital skills for academic work and for successful post-college life. Access library resources and ask questions at www.library.unlv.edu/

Required Text:

1. Effgen SK. *Meeting the Physical Therapy Needs of Children*, 2nd ed. Philadelphia, PA: FA Davis;2013.

Required Readings

1. Kaplan S, Coulter C, Feters L. Physical therapy management of congenital muscular torticollis: An evidence-based clinical practice guideline. *Pediatr Phys Ther*. 2013;25(4):348-394
2. Kenyon LK. The hypothesis-oriented pediatric focused algorithm: a framework for clinical reasoning in pediatric physical therapist practice. *Phys Ther* 2013;93:413-420

3. Novak I, McIntyre S, Morgan C, et al. A systematic review of interventions for children with cerebral palsy: state of the evidence. *Dev Med Child Neurol*. 2013;55(10):885-910.

Recommended Readings:

1. Bartlett DJ, Chiarello LA, McCoy SW, Palisano RJ, Jeffries L, Fiss AL, Rosenbaum P, Wilk P. Determinants of gross motor function of young children with cerebral palsy: a prospective cohort study. *Dev Med Child Neurol*. 2014;56: 275-282.
2. Gannotti ME, Christy JB, Heathcock JC, Kolobe THA. A path model for evaluating dosing parameters for children with cerebral palsy. *Phys Ther*. 2013;94:411-421
3. Lobo MA, Harbourne RT, Dusing SC, McCoy SW. Grounding early intervention: Physical therapy cannot just be about motor skills anymore. *Phys Ther*. 2013;93:94-103
4. O'Neil ME, Fragala-Pinkham MA, Westcott SL, et al, Physical therapy clinical management recommendations for children with cerebral palsy -spastic diplegia: Achieving functional mobility outcomes. *Pediatr Phys Ther*. 2006;18:49-72.

Additional readings as assigned by instructor.