



SACRAMENTO  
STATE

# Course Change Proposal Form A



Academic Group ( <i>College</i> ): <b>Health and Human Services</b>	Academic Organization ( <i>Department</i> ): <b>Physical Therapy</b>	Date: <b>4-10-09</b>
Type of Course Proposal: New ___ Change <u>X</u> Deletion ___	Department Chair: <b>Susan McGinty, PT, EdD</b>	Submitted by: <b>Susan McGinty, PT, EdD</b>
Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes ___ No <u>X</u>	For Catalog Copy: Yes <u>X</u> No ___ CCE ( <i>Extension</i> ): Yes ___ No <u>X</u>	Semester Effective: Fall ___ Spring <u>X</u> , 20 <u>10</u>

This course replaces experimental course Subject Area ( <i>prefix</i> ) and Catalog Nbr ( <i>course number</i> ):	
If changing an existing course, should new version be considered a repeat of the original version? If so, the same Course ID will be maintained. If not, a new Course ID will be assigned. Note: In PeopleSoft terminology, the Course ID is the unique system identifier, not the Catalog Nbr.	Yes ___ No <u>X</u>

**Change from:**

Subject Area ( <i>prefix</i> ) & Catalog Nbr ( <i>course no.</i> ): PT 264	Title: Neuropediatric Evaluation and Treatment	Units: 3
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**Change to:**

Subject Area ( <i>prefix</i> ) & Catalog Nbr ( <i>course no.</i> ): PT 264	Title: Neuropediatric Evaluation and Treatment	Units: 2
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**JUSTIFICATION:**

Pediatrics is a specialty area in physical therapy practice and although all of our students need preparation in this area to meet licensure and accreditation requirements, the depth of preparation in the current course exceeds the minimal requirement in pediatrics. Pediatrics is not a central core course in our curriculum and can be limited in the curriculum without jeopardizing the core competencies required of an entry-level professional PT.

**NEW COURSE DESCRIPTION:** (Not to exceed 80 words, and language should conform to catalog copy. See <http://www.csus.edu/umannual/acad.htm> - Guidelines for Catalog Course Description)

This course is the third part of a three course series focusing on the acquisition and integration of knowledge and skills involved in developing a treatment plan for the pediatric patient with neurologic dysfunction based on sound evaluative findings. Case presentations, video, and demonstrations will be used to develop evaluation, treatment and problem-solving skills. Open to Physical Therapy majors only.

Note:	
Prerequisite: BIO233; PT200; PT202; PT204; PT206; PT208; PT220; PT222; PT224; PT225; PT227; PT240; PT244; PT245; PT246; PT248; PT300 Enforced at Registration: Yes ___ No <u>X</u>	
Corequisite: PT260; PT262; PT266; PT268; PT269; PT500 Enforced at Registration: Yes ___ No <u>X</u>	
Graded: Letter <u>X</u> Credit/No Credit ___	Instructor Approval Required? Yes ___ No <u>X</u>
Course Classification ( <i>e.g., lecture, lab, seminar, discussion</i> ): C2; C16	Title for CMS (not more than 30 characters) Neuropeds Eval & Tx
Cross Listed? Yes ___ No <u>X</u>	If yes, do they meet together and fulfill the same requirement, and what is the other course.

How Many Times Can This Course be Taken for Credit? 1

Can the course be taken for Credit more than once during the same term? Yes \_\_\_ No X

## FOR NEW COURSE PROPOSALS OR SUBSTANTIVE CHANGES ONLY:

**Description of the Expected Learning Outcomes:** Describe outcomes using the following format: "Students will be able to: 1), 2), etc."  
See the example at <http://www.csus.edu/acaf/example.htm>

At the conclusion of the course, the student is expected to:

**Goal 1.0: Demonstrate Professional Competence in the treatment of children with neuromuscular disorders.**

- 1.1. Compare and contrast normal biological, physiological, and psychological mechanisms of the human body with pathophysiological factors that lead to impairments.
  - 1.1.1. Discuss the etiology and clinical features of major disorders.
    - 1.1.1.a. Describe common feeding disorders seen in children with neuromuscular disorders in relation to:
      - 1.1.1.a.i. Pathophysiology
      - 1.1.1.a.ii. Functional risks of the common disorders
    - 1.1.1.b. Discuss the psychological issues faced by clients and families dealing with adjustment to a disabled child and one with a terminal disorder.
    - 1.1.1.c. Discuss the changes that occur across the lifespan in clients due to a pediatric neuromuscular disorder such as cerebral palsy, and how that will influence the therapeutic management plan.
  - 1.1.2. Describe how pathological processes affect normal function.
    - 1.1.2.a. Compare and contrast the characteristics of preterm and full term neonates, including postural tone, behavioral state, and signs of self-regulation and stress.
    - 1.1.2.b. Apply the pathophysiology of pediatric disorders to physical therapy interventions, including:
      - 1.1.2.b.i. neuromuscular disorders
      - 1.1.2.b.ii. pediatric cardiac abnormalities
      - 1.1.2.b.iii. leukemia
  - 1.1.3. Discuss common medical/surgical treatments for major disorders.
    - 1.1.3.a. Integrate knowledge of common surgical procedures performed on children with neuromuscular disorders into the physical therapy POC.
  - 1.1.4. Analyze the effects of pharmacological agents on human function.
    - 1.1.4.a. Interpret how common medications will affect a patient's participation in and response to physical therapy activities, including
      - 1.1.4.a.i. anti-spasmodics
      - 1.1.4.a.ii. chemotherapy
      - 1.1.4.a.iii. seizure drugs
- 1.2. Determine the physical therapy needs of any individual seeking services.
  - 1.2.1. Perform an effective and efficient physical therapy screen.
    - 1.2.1.a. Select appropriate measurement tools used to assess the pediatric population, including but not limited to: (1.2.2., 1.2.3.)
      - 1.2.1.a.i. screening tools (1.2.2., 1.2.3.)
      - 1.2.1.a.ii. neonatal behavioral and reflex assessments (1.2.2., 1.2.3.)
      - 1.2.1.a.iii. standardized developmental tests (1.2.2., 1.2.3.)
      - 1.2.1.a.iv. functional/disability measures (1.2.2., 1.2.3.)
  - 1.2.2. Carry out appropriate examinations in a safe and client-centered manner.
    - 1.2.2.a. Perform an examination of a typically developing child using a standardized developmental test
    - 1.2.2.b. Perform an examination of a child with a neuromuscular disorder, both from a videotaped case study and on a client brought into the clinical lab.
  - 1.2.3. Evaluate and interpret the results of examinations to arrive at a physical therapy diagnosis.
    - 1.2.3.a. Apply knowledge of the developmental sequence in the following areas to the examination and treatment of pediatric patients. (Also under 1.4)
      - 1.2.3.a.i. gross motor
      - 1.2.3.a.ii. fine motor
      - 1.2.3.a.iii. oral motor
      - 1.2.3.a.iv. speech
      - 1.2.3.a.v. play
    - 1.2.3.b. Interpret the results from common measurement tools used in assessing the pediatric population
- 1.3. Develop a plan of care that considers the person's individual needs and goals, the pathophysiology involved, the biological mechanisms of human function, the environment where care is being rendered, accurate interpretation of the results of examinations, careful analysis of all gathered data, and resource constraints.
  - 1.3.1. Prioritize patient/client problems taking into consideration the patient/client's needs and goals, pathophysiology, and biological mechanisms within the constraints of the environment and resources.

- 1.3.1.a. Develop a problem list based on your evaluation of the pediatric clients seen on videotaped case studies and your client in the clinical lab.
- 1.3.1.b. Construct short and long term goals that address the problems identified in your examination, taking into account the environment and the child's and families needs.
- 1.3.1.c. Develop objectives for an IEP or IFSP in collaboration with the special education team and the family.
- 1.3.3. Select appropriate physical therapy interventions that consider the patient/client's needs and goals.
  - 1.3.3.a. Design a cost-effective plan of care based on your evaluation of a child with a neuromotor disability, selecting appropriate physical therapy interventions.
- 1.4. Describe the physical therapy plan of care designed to restore and/or maintain optimal function, applying selected therapeutic interventions that demonstrate safe, effective, and efficient psychomotor skills in the performance of physical therapy procedures and techniques.
  - 1.4.1. Discuss the most efficient and effective therapeutic interventions utilizing appropriate physical therapy procedures and techniques to produce changes in the patient/client's condition consistent with the diagnosis and prognosis.
    - 1.4.1.a. Demonstrate a therapeutic exercise program for the pediatric client with a neuromuscular disorder.
    - 1.4.1.b. Select the appropriate equipment to enhance the child's mobility and function in light of your treatment goals, including but not limited to:
      - 1.4.1.b.i. orthoses
      - 1.4.1.b.ii. wheelchairs and wheelchair accessories
      - 1.4.1.b.iii. other durable medical equipment such as positioning, bathing, and gait devices
    - 1.4.1.c. Describe appropriate interventions for the management of common feeding problems in children with neuromuscular disorders
  - 1.4.2. Discuss modification or redirection of selected therapeutic interventions in light of reexaminations and/or patient/client's response to interventions.
    - 1.4.2.a. Modify the physical therapy program in light of the psychosocial and socioeconomic aspects associated with the pediatric client with a neuromuscular disorder.
- 1.5. Demonstrate effective verbal and written communication skills with patients, families, other health care professionals, and the public, to facilitate therapeutic interventions and interdisciplinary interactions and cooperation.
  - 1.5.1. Determine the appropriate documentation for the recording of patient/client information consistent with the fiscal intermediary, and the treatment setting.
    - 1.5.1.a. Describe the documentation of the results of examination, plan of care, and intervention program for both a typically developing child and one with a neuromuscular disorder. (1.5.2.)
  - 1.5.3. Communicate efficiently and effectively with other health care providers involved in the patient/client's care.
    - 1.5.3.a. Communicate with other members of the rehabilitation team, including but not limited to the MD, CPO, RN, OTR, SLP, PTA, teacher, and aides. (2.2.)
- 1.6. Determine the appropriate discharge and follow-up plan for patients/clients.
  - 1.6.1. Determine when further physical therapy intervention is no longer beneficial.
  - 1.6.2. Determine when a patient/client is unable to continue to progress toward goals with further physical therapy intervention.
  - 1.6.3. Determine when a patient/client has reached optimal goals with physical therapy interventions.
    - 1.6.3.a. Determine when the child has reached optimal goals with physical therapy interventions, or when therapy is no longer indicated. (1.6.2., 1.6.3.)
- 1.7. Provide rationales for all decisions made in your management of the child with a neuromuscular disorder.

**Goal 2.0: Demonstrate Professional Behaviors**

- 2.1. Recognize cultural, ethnic, age, economic, and psychosocial differences and apply a humanistic and holistic approach to the delivery of a clinical service.
  - 2.1.a. See 1.1.1.c.
  - 2.1.2. Work effectively with challenging patients.
    - 2.1.2.a. Employ knowledge of mechanisms of injury to recognize potentially abusive situations and follow reporting requirements. (2.1.4.)
- 2.2. Communicate effectively for varied audiences and purposes.
  - 2.2.1. Demonstrate effective verbal and nonverbal communication skills considering the diversity of populations and environments.
    - 2.2.1.a. Communicate effectively with children and their families. (2.2.2.)
  - 2.2.4. Recognize communication technology and its efficacy when appropriate.
    - 2.2.4.a. Describe adaptive communication methods for children with speech disorders, including the use of alternative and augmentative communication methods. (also under 2.2)
- 2.5. Demonstrate professional responsibility in all interactions.
  - 2.5.1. Demonstrate dependability.
    - 2.5.1.a. Demonstrate appropriate behaviors in class, laboratory and clinical sessions as defined by the generic abilities. (2.5.2., 2.5.3., 2.5.4., 2.5.5., 2.5.6., 2.5.7.)

**Goal 3.0: Practice in an Ethical and Legal Manner**

3.1. Practice physical therapy in a safe, legal, ethical and professional manner.

3.1.a. Practice physical therapy during laboratory clinical sessions safely, ethically, and legally, seeking assistance from the supervising faculty as needed.

**Goal 4.0: Demonstrate Scholarship**

4.1. Apply basic principles of statistics and research methodologies within the practice of physical therapy.

4.1.3. Evaluate the efficacy and effectiveness of physical therapy therapeutic interventions.

4.1.3.a. Apply knowledge from the scientific literature to the evaluation and treatment of children.

4.1.4. Read, critique, and interpret professional literature.

4.1.4.a. Critique the literature on selected controversial topics in pediatric rehabilitation.

\*\*Attach a list of the required/recommended course readings and activities [Note: it is understood that these are updated and modified as needed by the instructor(s).] This attachment should be forwarded only to your Dean's office, not Academic Affairs.

**Assessment Strategies:** A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above:

1. Each student will complete a pediatric measurement tool on a typically developing infant or child.
2. Each student will complete a written evaluation of a pediatric client with a neuromuscular disorder based on a videotaped case study.
3. Each student will complete a letter of justification for a needed item of durable medical equipment, either for their clinical client or a simulated case study.
4. Each group of students will complete an evaluation, treatment plan, treatment activities and notes, and home program for a client with a neuromuscular disorder.
5. In groups of three, students will complete a critical review of the literature on a controversial topic in pediatric neuromuscular rehabilitation. Each group will prepare a brief written paper and present their findings to the class.
6. Clinical Information sheet: The students will be divided into groups of 2. Each group will be assigned a specific diagnosis and complete a 1 page description of that diagnosis, including etiology, pathophysiology, medical and PT management, and prognosis, to be shared with the class.

For whom is this course being developed?

Majors in the Dept  Majors of other Depts \_\_\_ Minors in the Dept \_\_\_ General Education \_\_\_ Other \_\_\_

Is this course required in a degree program (major, minor, graduate degree, certificate)? Yes  No \_\_\_

If yes, identify program(s):

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer facilities, faculty, etc.)? Yes \_\_\_ No

If yes, attach a description of resources needed and verify that resources are available.

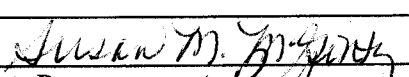
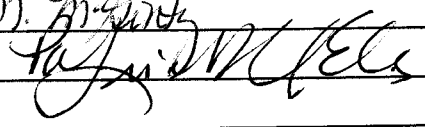
Indicate which department or programs will be affected by the proposed course (if any). Physical Therapy

*The Department Chair's signature below indicates that affected programs have been sent a copy of this proposal form.*

**Approvals:** If proposed change, new course or deletion is approved, sign and date below. If not approved, forward without signing to the next reviewing authority, and attach an explanatory memorandum to the original copy.

**Signatures:**

**Date**

Department Chair:		4-22-09
College Dean or Associate Dean:		4/24-09
CPSP (for school personnel courses ONLY)		
Associate Vice President and Dean for Academic Programs		

Distribution: Academic Affairs (original), Department Chair and College Dean. Dean's office to send original after approval to Academic Affairs, at mail zip 6016. An electronic copy must also be sent.

CALIFORNIA STATE UNIVERSITY, SACRAMENTO  
College of Health and Human Services  
Department of Physical Therapy

**PT 264 - Neuropediatric Evaluation & Treatment**

Spring Semester

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**COURSE CREDIT:** 2 units: 1 hour lecture, 3 hours of lab per week

**INSTRUCTORS:** To be arranged

**LOCATION:** To be arranged

**TIME:** To be arranged

**COURSE DESCRIPTION:**

This course is the third part of a three course series focusing on the acquisition and integration of knowledge and skills involved in developing and implementing a treatment plan for the pediatric patient with neurologic dysfunction based on sound evaluative findings. Case presentation, video demonstrations and actual patient contact will be used to develop evaluation, treatment and problem-solving skills. **Open to Physical Therapy majors only.**

**PREREQUISITES:**

BIO 233 Applied Musculoskeletal Anatomy for PTs  
PT 200 Pathokinesiology  
PT 202 Research Methods in Physical Therapy I  
PT 204 Principles of Human Movement  
PT 206 Therapeutic Measurements & Techniques  
PT 208 PT/Patient/Professional Interactions  
PT 220 Therapeutic Exercise I  
PT 222 Research Methods in Physical Therapy II  
PT 224 Neurological Evaluation & Treatment I  
PT 225 Musculoskeletal Evaluation & Treatment I  
PT 226 Clinical Agents  
PT 227 Physical Therapy Educator  
PT 240 Therapeutic Exercise II  
PT 244 Neurological Evaluation & Treatment II  
PT 245 Musculoskeletal Evaluation and Treatment II  
PT 246 Special Topics in Physical Therapy  
PT 248 Health Care Delivery in Physical Therapy I  
PT 300 Clinical Practicum I

## **CO-REQUISITES:**

- PT 260 Graduate PT Seminar I
- PT 262 Differential Diagnosis in Physical Therapy
- PT 266 Special Topics in Physical Therapy II
- PT 268 Health Care Delivery in Physical Therapy II
- PT 269 Psychosocial Issues in Physical Therapy
- PT 500 Culminating Experience

## **REQUIRED TEXTS:**

APTA, *Guidelines to Clinical Practice*, 1997

Campbell, Suzann. *Physical Therapy for Children*, Philadelphia, PA. W. B. Saunders Co., current edition.

Lundy-Eckman, L. *Neuroscience for Rehabilitation*. Philadelphia, PA. F.A. Davis Co., current edition.

Palmer, Lynn; Toms, Janice. *Manual for Functional Training*, Philadelphia, PA. F.A. Davis Co., current edition.

Umphred, Darcy. *Neurological Rehabilitation*, St. Louis, MO. Mosby-Year Book, Inc., current edition.

## **COURSE OBJECTIVES: (Referenced to Program Educational Goals and Related Objectives)**

At the conclusion of the course, the student is expected to:

### **Goal 1.0: Demonstrate Professional Competence in the treatment of children with neuromuscular disorders.**

- 1.1. Compare and contrast normal biological, physiological, and psychological mechanisms of the human body with pathophysiological factors that lead to impairments.
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      - 1.1.1.a.i. Pathophysiology
      - 1.1.1.a.ii. Functional risks of the common disorders
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    - 1.1.1.c. Discuss the changes that occur across the lifespan in clients due to a pediatric neuromuscular disorder such as cerebral palsy, and how that will influence the therapeutic management plan.

- 1.1.2. Describe how pathological processes affect normal function.
  - 1.1.2.a Compare and contrast the characteristics of preterm and full term neonates, including postural tone, behavioral state, and signs of self-regulation and stress.
  - 1.1.2.b Apply the pathophysiology of pediatric disorders to physical therapy interventions, including:
    - 1.1.2.b.i neuromuscular disorders
    - 1.1.2.b.ii pediatric cardiac abnormalities
    - 1.1.2.b.iii leukemia
- 1.1.3. Discuss common medical/surgical treatments for major disorders.
  - 1.1.3.a Integrate knowledge of common surgical procedures performed on children with neuromuscular disorders into the physical therapy POC.
- 1.1.4. Analyze the effects of pharmacological agents on human function.
  - 1.1.4.a Interpret how common medications will affect a patient's participation in and response to physical therapy activities, including
    - 1.1.4.a.i anti-spasmodics
    - 1.1.4.a.ii chemotherapy
    - 1.1.4.a.iii seizure drugs
- 1.2. Determine the physical therapy needs of any individual seeking services.
  - 1.2.1. Perform an effective and efficient physical therapy screen.
    - 1.2.1.a Select appropriate measurement tools used to assess the pediatric population, including but not limited to: (1.2.2., 1.2.3.)
      - 1.2.1.a.i screening tools (1.2.2., 1.2.3.)
      - 1.2.1.a.ii neonatal behavioral and reflex assessments (1.2.2., 1.2.3.)
      - 1.2.1.a.iii standardized developmental tests (1.2.2., 1.2.3.)
      - 1.2.1.a.iv functional/disability measures (1.2.2., 1.2.3.)
  - 1.2.2. Carry out appropriate examinations in a safe and client-centered manner.
    - 1.2.2.a Perform an examination of a typically developing child using a standardized developmental test
    - 1.2.2.b Perform an examination of a child with a neuromuscular disorder, both from a videotaped case study and on a client brought into the clinical lab.
  - 1.2.3. Evaluate and interpret the results of examinations to arrive at a physical therapy diagnosis.
    - 1.2.3.a Apply knowledge of the developmental sequence in the following areas to the examination and treatment of pediatric patients. (Also under 1.4)
      - 1.2.3.a.i gross motor
      - 1.2.3.a.ii fine motor
      - 1.2.3.a.iii oral motor
      - 1.2.3.a.iv speech
      - 1.2.3.a.v play
    - 1.2.3.b Interpret the results from common measurement tools used in assessing the pediatric population