Course Change Proposal
Form A

Academic Group (College): Health and Human Services
Academic Organization (Department): Physical Therapy
Date: 2/8/2011

Department Chair: Dr. McGinty
Submitted by: Dr. Barakatt

Type of Course Proposal: New _X_ Change _x_ Deletion __

Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes __ No _x_

For Catalog Copy: Yes _x_ No __
CCE (Extension): Yes __ No _x_
Semester Effective: Fall _X_ Spring _2012_

This course replaces experimental course Subject Area (prefix) and Catalog Nbr (course number):

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 __

Change from:
Subject Area (prefix) & Catalog Nbr (course no.): PT260
Title: Graduate Physical Therapy Seminar I
Units: 1 – 2

Change to:
Subject Area (prefix) & Catalog Nbr (course no.): PT 660C
Title: Graduate Physical Therapy Seminar IC: Research
Units: 1

JUSTIFICATION:
This course is being changed as part of the curriculum changes with the new DPT program required for continued accreditation for the program. The course has been upgraded to reflect the expectations in a doctoral program. This course focuses on research.

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

This seminar is the third designed for advanced study and mentoring in physical therapy research. Students will be participating in faculty-directed research projects. Students' activities will vary depending on the faculty member and research project being conducted. Students are required to perform at least 50 hours of activities toward the directed research project to receive credit for this course. This course satisfies one of two requirements for selected seminars in the DPT curriculum. Open to Physical Therapy Majors Only.

Note:

Prerequisite:
BIO633 Human Gross Anatomy for Physical Therapists
PT 600 Pathokinesiology
PT 602 Evidence Informed Practice I
PT 608 PT/Patient/Professional Interactions
PT 630 Pathophysiology
PT 604 Principles of Human Movement
PT 606 Therapeutic Measurements & Techniques
PT 614 Neuroscience for Physical Therapists
PT 618 Foundations for Patient Management
PT 620 Physical Therapy Interventions I
PT 622 Evidence Informed Practice II
PT 632 Pharmacology for Physical Therapists
PT 634 Diagnostic Imaging for Physical Therapists
PT 636 Geriatrics/Gerontology for Physical Therapists
PT 636 Health, Wellness, and Ergonomics in Physical Therapy
PT 624 Adult Neuromuscular Patient Management I
PT 625 Musculoskeletal Patient Management I
PT 626 Clinical Agents
PT 640 PT Interventions II
PT 646  Acute Care and Cardiopulmonary PT
PT 227  Physical Therapy Educator
PT 644  Adult Neuromuscular Patient Management II
PT 645  Musculoskeletal Patient Management II
PT 648  Health Care Delivery in Physical Therapy I
PT 669  Psychosocial Issues in Physical Therapy
PT 662  Differential Diagnosis in Physical Therapy

Enforced at Registration:  Yes  No

Corequisite:
PT 663  Integumentary Patient Management
PT 664  Neuropediatric Patient Management
PT 665  Musculoskeletal Patient Management III
PT 668  Health Care Delivery in Physical Therapy II
PT 680  Graduate Physical Therapy Seminar
PT 690  Doctoral Project/Culminating Experience

Enforced at Registration:  Yes  No  x

Graded:  Letter  x  Credit/No Credit
Instructor Approval Required?  Yes  No  x

Course Classification (e.g., lecture, lab, seminar, discussion):  Seminar C-05
Title for CMS (not more than 30 characters)
Graduate PT Seminar IC

Cross Listed?  Yes  No  x
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?  once

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/acad/example.htm

This seminar is designed for advanced study and mentoring in physical therapy research. Students will be participating in faculty-directed research projects. Students' activities will vary depending on the faculty member and research project being conducted. Students are required to perform at least 50 hours of activities toward the directed research project to receive credit for this course. This course satisfies one of two requirements for selected seminars in the DPT curriculum.

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

Goal 2.0:  Demonstrate Professional Behaviors
2.5  Demonstrate entry level generic abilities, including:
  2.5.1  Professional accountability and commitment to learning.
  2.5.1.1  Appropriately completing and promptly turning in assignments.
  2.5.3  Effective use of constructive feedback.
  2.5.3.1  Adequately revise assignment based on feedback provide
  2.5.4  Effective use of time and resources.
  2.5.4.1  Effectively work with colleagues on scholarly activities

Goal 4.0:  Demonstrate Scholarship
4.1  Apply basic principles of statistics and research methodologies within the practice of physical therapy.
4.2  Contribute to the body of knowledge of physical therapy.
  4.2.1  Participate in, plan, and/or conduct clinical, basic, or applied research.
  4.2.1.1  Contribute to conducting a research project pertaining to the physical therapy profession.
  4.2.1.2  Recognizing and understanding laws and regulations pertaining to the protection of human subjects who participate in research project.
  4.2.2  Disseminate the results of scholarly activities.
  4.2.2.1  Participate in the dissemination of the results of the research project.

*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:
**Grading:**
This course will be graded A-F with a B passing grade earned when the student contributes at least fifty hours to the research project in a capable fashion as judged by the faculty mentor.

---

**For whom is this course being developed?**
- [x] Majors in the Dept. 
- [ ] Minors in the Dept. 
- [ ] General Education 
- [ ] Other

Is this course required in a degree program (major, minor, graduate degree, certificate)?
- [x] Yes
- [ ] No

If yes, identify program(s): DPT

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
- [x] 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.*

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**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.

<table>
<thead>
<tr>
<th>Signatures:</th>
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<tbody>
<tr>
<td>Department Chair:</td>
<td>[Signature]</td>
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<tr>
<td>College Dean or Associate Dean:</td>
<td>[Signature]</td>
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<td>CPSP (for school personnel courses ONLY)</td>
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<tr>
<td>Associate Vice President and Dean for Academic Programs</td>
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</tbody>
</table>

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.

9/10/2008
CALIFORNIA STATE UNIVERSITY, SACRAMENTO
College of Health and Human Services
Department of Physical Therapy

PT660C – Graduate Physical Therapy Seminar IC: Research

Fall

COURSE CREDIT: 1 units

INSTRUCTOR: TBA

LOCATION: TBA

TIME: TBA.

COURSE DESCRIPTION:
This seminar is the third designed for advanced study and mentoring in physical therapy research. Students will be participating in faculty-directed research projects. Students’ activities will vary depending on the faculty member and research project being conducted. Students are required to perform at least 50 hours of activities toward the directed research project to receive credit for this course. This course satisfies one of two requirements for selected seminars in the DPT curriculum. Open to Physical Therapy Majors Only.

PREREQUISITES:
BIO633 Human Gross Anatomy for Physical Therapists
PT 600 Pathokinesiology
PT 602 Evidence Informed Practice I
PT 608 PT/Patient/Professional Interactions
PT 630 Pathophysiology
PT 604 Principles of Human Movement
PT 606 Therapeutic Measurements & Techniques
PT 614 Neuroscience for Physical Therapists
PT 618 Foundations for Patient Management
PT 620 Physical Therapy Interventions I
PT 622 Evidence Informed Practice II
PT 632 Pharmacology for Physical Therapists
PT 634 Diagnostic Imaging for Physical Therapists
PT 636 Geriatrics/Gerontology for Physical Therapists
PT 636 Health, Wellness, and Ergonomics in Physical Therapy
PT 624 Adult Neuromuscular Patient Management I
PT 625 Musculoskeletal Patient Management I
PT 626 Clinical Agents
PT 640 PT Interventions II
PT 646 Acute Care and Cardiopulmonary PT
PT 227 Physical Therapy Educator
PT 644 Adult Neuromuscular Patient Management II
PT 645 Musculoskeletal Patient Management II
PT 648 Health Care Delivery in Physical Therapy I
PT 669  Psychosocial Issues in Physical Therapy
PT 662  Differential Diagnosis in Physical Therapy

CO-REQUISITES:
PT 663  Integumentary Patient Management
PT 664  Neuropediatric Patient Management
PT 668  Health Care Delivery in Physical Therapy II
PT 680  Graduate Physical Therapy Seminar
PT 690  Doctoral Project/Culminating Experience

REQUIRED TEXTS:
TBA

COURSE OBJECTIVES:

All course objectives reference the overall educational goals and outcomes of the Department of Physical Therapy.

At the completion of this course, the student is expected to be able to:

Goal 2.0:  Demonstrate Professional Behaviors

2.5  Demonstrate entry level generic abilities, including:
   2.5.1  Professional accountability and commitment to learning.
          2.5.1.1  Appropriately completing and promptly turning in assignments.
   2.5.3  Effective use of constructive feedback.
          2.5.3.1  Adequately revise assignment based on feedback provide
   2.5.4  Effective use of time and resources.
          2.5.4.1  Effectively work with colleagues on scholarly activities

Goal 4.0:  Demonstrate Scholarship

4.1  Apply basic principles of statistics and research methodologies within the practice of physical therapy.
4.2  Contribute to the body of knowledge of physical therapy.
   4.2.1  Participate in, plan, and/or conduct clinical, basic, or applied research.
          4.2.1.1  Contribute to conducting a research project pertaining to the physical therapy profession.
          4.2.1.2  Recognizing and understanding laws and regulations pertaining to the protection of human subjects who participate in research project.
   4.2.2  Disseminate the results of scholarly activities.
          4.2.2.1  Participate in the dissemination of the results of the research project.

TEACHING STRATEGIES AND LEARNING ACTIVITIES:
Variable depending on the project, may include:
1.  Lectures, demonstrations and discussion led by faculty mentor
2.  Searching the physical therapy scientific literature
3.  Research article critiques
4.  Data collection, data management, data analysis, preparation of data for presentation
5.  Preparing a manuscript for dissemination
6. Presenting study findings at a professional meeting/conference.
7. Protection of human research subjects

**GRADING PROCEDURES:**
**Grading:**

This course will be graded A-F with a B passing grade earned when the student contributes at least fifty hours to the research project in a capable fashion, as judged by the faculty mentor.

**Behavioral expectations:** Students are responsible for appropriate behaviors as defined by the generic abilities. Failure to comply with behavioral expectations during class may result in a student first being warned that behavior is inappropriate, then, if inappropriate behavior continues, a student may be asked to leave a class. Repeated failure to comply with behavioral expectations can lead to failure in the course. Cell phones and beepers should be off or silent (set to vibration mode) during the class. No text messaging is permitted in class.

**Special accommodations:** During the course of the year, some students may utilize prearranged accommodations. If you are a student with a learning disability, physical disability, or other special needs, please let me know as soon as possible if you need special accommodation. These kinds of confidential discussions are best handled during my office hours or by special appointment. You can expect confidentiality and cooperation regarding any circumstances and needs that have been verified though the Office of Services to Students with Disabilities (SSWD).

**TENTATIVE SCHEDULE:**
The time schedule for this course will be worked out by the student and the faculty mentor.

**STUDENTS SHOULD READ AND BECOME FAMILIAR WITH THE UNIVERSITY’S ACADEMIC HONESTY, POLICY & PROCEDURES WHICH CAN BE FOUND AT:**
[www.csus.edu/admbus/umanual/UMA00150.htm](http://www.csus.edu/admbus/umanual/UMA00150.htm)  The following are direct quotes from the first sections of that document:

"The principles of truth and honesty are recognized as fundamental to a community of scholars and teachers. California State University, Sacramento (CSUS) expects that both faculty and students will honor these principles, and in so doing, will protect the integrity of academic work and student grades. CSUS is a publicly-assisted institution legislatively empowered to certify competence and accomplishment in general and discrete categories of knowledge. The President and faculty of CSUS are therefore obligated not only to the world at large but also to California to guarantee that substantive knowledge is actually acquired and the ability to acquire it is actually demonstrated by those to whom they assign grades and whom they recommend for degrees. Academic dishonesty defrauds all those who depend upon the integrity of the University, its courses and its degrees. This fraud is accomplished to the extent that faculty, students or campus employees knowingly or unwittingly allow academic dishonesty to work its deception."

"....Plagiarism is a form of cheating. At CSUS plagiarism is the use of distinctive ideas or works belonging to another person without providing adequate acknowledgement of that person’s contribution. Regardless of the means of appropriation, incorporation of another’s work into one’s own requires adequate identification and acknowledgement. Plagiarism is doubly unethical because it deprives the author of rightful credit and gives credit to someone who has not earned it. Acknowledgement is not necessary when the material used is common knowledge."
Course Change Proposal
Form A

Academic Group (College): Health and Human Services
Academic Organization (Department): Physical Therapy
Date: 2/22/2011

Type of Course Proposal:
New ___ Change x ___ Deletion ___

Department Chair: Dr. McGinty
Submitted by: Dr. McKeough

Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes ___ No x ___

For Catalog Copy: Yes x ___ No ___
CCE (Extension): Yes ___ No x ___

Semester Effective: Fall x ___ Spring 2012

This course replaces experimental course Subject Area (prefix) and Catalog Nbr (course number):
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 ___

Change from:
Subject Area (prefix) & Catalog Nbr (course no.): PT260
Title: Graduate Physical Therapy Seminar I
Units: 1 - 2

Change to:
Subject Area (prefix) & Catalog Nbr (course no.): PT 660D
Title: Graduate Physical Therapy Seminar ID: Electrotherapeutics Laboratory
Units: 2

JUSTIFICATION:
This course is being changed as part of the curriculum changes with the new DPT program required for continued accreditation for the program. The course reflects the expectations of opportunities for advanced study in a doctoral program. This seminar option within PT 600A-G addresses the development of advanced clinical skills in electrophysiology and electrodiagnostics in physical therapy.

NEW COURSE DESCRIPTION: (Not to exceed 80 words, and language should conform to catalog copy. See http://www.csus.edu/umanual/acad.htm - Guidelines for Catalog Course Description)
This is a seminar laboratory experience focusing on electrophysiology and electrodiagnostics in physical therapy. The lab will allow students to research and apply evidence-based practice and gain advanced hands-on practice in performing and interpreting the results of electromyographic and nerve conduction velocity testing with clients. This course satisfies one of two requirements for selected seminars in the curriculum. Open to Physical Therapy majors only.

Prerequisite:
BIO 633 Human Gross Anatomy for Physical Therapists
PT 600 Pathokinesiology
PT 608 PT/Patient/Professional Interactions
PT 630 Pathophysiology
PT 602 Evidence Informed Practice I
PT 604 Principles of Human Movement
PT 606 Therapeutic Measurements and Techniques
PT 614 Neuroscience for Physical Therapists
PT 618 Foundations for Patient Management
PT 620 Physical Therapy Interventions I
PT 622 Evidence Informed Practice II
PT 632 Pharmacology for Physical Therapists
PT 634 Diagnostic Imaging for Physical Therapists
PT 636 Geriatrics/Gerontology for Physical Therapists
PT 638 Health, Wellness and Ergonomics in Physical Therapy
PT 627 Physical Therapy Educator
PT 624 Adult Neuromuscular Patient Management I
PT 625 Musculoskeletal Patient Management I
PT 626 Clinical Agents
PT 640 Physical Therapy Interventions II
PT 646 Acute Care and Cardiopulmonary Physical Therapy
Enforced at Registration: Yes ___ No ___

Corequisite:

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<tr>
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<td>PT 627 Physical Therapy Educator</td>
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<td>PT 662 Differential Diagnosis in Physical Therapy</td>
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Enforced at Registration: Yes ___ No ___

Graded: Letter ___ Credit/No Credit ___

Instructor Approval Required? Yes ___ No ___

Course Classification (e.g., lecture, lab, seminar, discussion): Seminar C-05

If yes, do they meet together and fulfill the same requirement, and what is the other course.

Cross Listed? Yes ___ No ___

How Many Times Can This Course be Taken for Credit? ___ once ___

Can the course be taken for credit more than once during the same term? Yes ___ No ___

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/acca/exampl.htm

This course outlines the theory, evidence, and practice guidelines that are necessary to begin a career in electromyography.

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

**Goal 1.0 Demonstrate Professional Effectiveness**

1.1 Compare and contrast normal biological, physiological, and psychological mechanisms of the human body with pathophysiologic factors that lead to impaired body functions and structure.
   1.1.1 Discuss the etiology and clinical features of major disorders.
   1.1.2 Describe how pathologic processes affect normal function.
      1.1.2.1 Identify the clinical characteristics for lesions affecting the peripheral nervous system.
      1.1.2.2 Describe the neuroanatomical structure and functioning of and the clinical implications of lesions or disorders affecting the peripheral nervous system
   1.1.3 Discuss common medical/surgical treatments for major disorders.
      1.1.3.1 Discuss common medical/surgical treatments for a patient client with disorders of the peripheral nervous system.

1.2 Determine the physical therapy needs of any individual seeking services.
   1.2.2 Review pertinent medical records and conduct a comprehensive patient interview.
      1.2.2.1 Recognize medical record findings consistent with a lesion of the peripheral nervous system.
   1.2.3 Carry out appropriate and comprehensive patient examinations including tests and measures in a safe and client-centered manner.
      1.2.3.1 Apply knowledge of the neuroanatomy and pathophysiology of disorders of the motor and peripheral nervous system to the physical therapy evaluation.
      1.2.3.2 Select and interpret the results from electrophysiologic measurement tools used in assessing patients/clients with disorders of the motor and peripheral nervous systems.
   1.2.11 Integrate and evaluate data that are obtained during the examination to describe the patient condition in terms that will guide the prognosis, the plan of care and intervention strategies.
      1.2.11.1 Interpret electrophysiologic test findings terms of guiding the development of a prognosis, plan of care and intervention strategies.
   1.2.12 Identify and prioritize body function and structure impairments to determine specific activity limitations towards which interventions will be directed.
      1.2.12.1 Recognize the various levels of structural impairments based on electrophysiologic findings
   1.2.13 Make a referral to another physical therapist, other health care practitioner or agency when physical therapy is not indicated or the patient/client’s needs are beyond the skills, expertise and/or scope of practice of the physical therapist practitioner.
      1.2.13.1 Recognize electrophysiologic findings that warrant referral to the appropriate health care professional.
   1.2.14 Determine the need for additional information and utilize technological search mechanisms to find that information.
   1.2.15 Adapt delivery of physical therapy services with consideration for patients’ differences, values, preferences and needs.
   1.5 Demonstrate effective verbal and written communication skills with patients, families, other health care professionals, and the public, to facilitate interventions and interdisciplinary interactions and cooperation.
   1.5.1 Determine appropriate documentation for the recording of patient/client information consistent with professional standards, the fiscal intermediary, and the treatment setting.
      1.5.1.1 Properly document electrodiagnostic examination findings
1.5.2 Produce quality documentation in a timely manner to support the delivery of physical therapy services.

1.8 Provide consultative services applying the unique knowledge and skills of a physical therapist to identify problems, recommend solutions, or produce an outcome or product.

**Goal 2.0 Demonstrate Professional Behaviors**

2.4 Recognize the need for personal and professional development.

2.4.2 Welcome and seek new learning opportunities.

2.4.2.1 Recognize the opportunity and requirements for attaining a board certification in clinical electrophysiology

Demonstrate entry level generic abilities, including:

2.5.1 Professional accountability and commitment to learning.

2.5.1.1 Recognition of one’s own limitations.

2.5.1.2 Effective use of constructive feedback.

2.5.1.3 Effective use of time and resources.

2.5.1.4 Demonstrate integrity, compassion, and courage in all interactions.

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

3.1 Practice physical therapy in a manner consistent with established legal and professional standards.

3.1.1 Demonstrate awareness of and adherence to state licensure regulations.

3.1.2 Practice within all applicable regulatory and legal requirements.

3.1.2.1 Demonstrate knowledge of the laws and regulations pertaining to practicing as a board certified clinical electrophysiologist.

**Goal 4.0: Demonstrate Scholarship**

4.1 Adhere to all applicable state and federal laws.

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

4.1.3.1 Evaluate the efficacy and effectiveness of electrotherapeutic modalities.

4.1.4 Read, critique, and interpret professional literature.

4.1.4.1 Read, critique, and interpret professional literature on modalities.

4.2 Contribute to the body of knowledge of physical therapy.

4.2.1 Participate in, plan and/or conduct clinical, basic, or applied research.

**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:

**Assessments:**

Describe the theory and practice of electromyographic and nerve conduction velocity testing 20%

Correctly perform electromyographic testing 20%

Correctly interpret the results of electromyographic testing 20%

Correctly perform nerve conduction velocity testing 20%

Correctly interpret the results of nerve conduction velocity testing 20%

**GRADING**

A = 90% - 100%

B = 80% - 89%

C = 70% - 79%

D = 60% - 69%

F = < 60%

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**For whom is this course being developed?**

- Majors in the Dept: x __
- 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 _x_ No __

If yes, identify program(s): DPT

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 _x_

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.

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<tbody>
<tr>
<td><strong>Department Chair:</strong></td>
<td><strong>2-19-11</strong></td>
</tr>
<tr>
<td>College Dean or Associate Dean:</td>
<td><strong>2-22-11</strong></td>
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<tr>
<td>CISP (for school personnel courses ONLY)</td>
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<tr>
<td>Associate Vice President and Dean for Academic Programs</td>
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**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.

9/10/2008
CALIFORNIA STATE UNIVERSITY SACRAMENTO
College of Health and Human Services
Department of Physical Therapy

PT660D Electrotherapeutics Laboratory

Spring Semester

COURSE CREDIT:  2 units

INSTRUCTOR:  TBA
OFFICE:
OFFICE HOURS:
TELEPHONE:
E-MAIL:

CLASSROOM:  TBA
TIME:  TBA

COURSE DESCRIPTION
This is a seminar laboratory experience focusing on electrophysiology and electrodiagnostics in physical therapy. The lab will allow students to research and apply evidence-based practice and gain advanced hands-on practice in performing and interpreting the results of electromyographic and nerve conduction velocity testing with clients. This course satisfies one of two requirements for selected seminars in the curriculum. Open to Physical Therapy majors only.

PREREQUISITES:
BIO 633  Human Gross Anatomy for Physical Therapists
PT 600  Pathokinesiology
PT 608  PT/Patient/Professional Interactions
PT 630  Pathophysiology
PT 602  Evidence Informed Practice I
PT 604  Principles of Human Movement
PT 606  Therapeutic Measurements and Techniques
PT 614  Neuroscience for Physical Therapists
PT 618  Foundations for Patient Management
PT 620  Physical Therapy Interventions I
PT 622  Evidence Informed Practice II
PT 632  Pharmacology for Physical Therapists
PT 634  Diagnostic Imaging for Physical Therapists
PT 636  Geriatrics/Gerontology for Physical Therapists
PT 638  Health, Wellness and Ergonomics in Physical Therapy
PT 624  Adult Neuromuscular Patient Management I
PT 625  Musculoskeletal Patient Management I
PT 626  Clinical Agents
PT 640  Physical Therapy Interventions II
PT 646  Acute Care and Cardiopulmonary Physical Therapy
CO-REQUISITES:
PT 227    Physical Therapy Educator
PT 644    Adult Neuromuscular Patient Management II
PT 645    Musculoskeletal Patient Management II
PT 648    Health Care Delivery in Physical Therapy I
PT 662    Differential Diagnosis in Physical Therapy
PT 669    Psychosocial Issues in Physical Therapy

REQUIRED TEXTS/REFERENCES:

COURSE OBJECTIVES: (Referenced to Program Educational Outcomes and Related Objectives)
At the conclusion of this course, the student is expected to:

Goal 1.0 Demonstrate Professional Effectiveness
1.1 Compare and contrast normal biological, physiological, and psychological mechanisms of the human body with pathophysiological factors that lead to impaired body functions and structure.
   1.1.1 Discuss the etiology and clinical features of major disorders.
   1.1.2 Describe how pathological processes affect normal function.
       1.1.2.1 Identify the clinical characteristics for lesions affecting the peripheral nervous system.
       1.1.2.2 Describe the neuroanatomical structure and functioning of and the clinical implications of lesions or disorders affecting the peripheral nervous system
   1.1.3 Discuss common medical/surgical treatments for major disorders.
       1.1.3.1 Discuss common medical/surgical treatments for a patient client with disorders of the peripheral nervous system.

1.2 Determine the physical therapy needs of any individual seeking services.
   1.2.2 Review pertinent medical records and conduct a comprehensive patient interview.
       1.2.2.1 Recognize medical record findings consistent with a lesion of the peripheral nervous system.
   1.2.3 Carry out appropriate and comprehensive patient examinations including tests and measures in a safe and client-centered manner.
       1.2.3.1 Apply knowledge of the neuroanatomy and pathophysiology of disorders of the motor and peripheral nervous system to the physical therapy evaluation.
       1.2.3.2 Select and interpret the results from electrophysiologic measurement tools used in assessing patients/clients with disorders of the motor and peripheral nervous systems.
   1.2.11 Integrate and evaluate data that are obtained during the examination to describe the patient condition in terms that will guide the prognosis, the plan of care and intervention strategies.
       1.2.11.1 Interpret electrophysiologic test findings terms of guiding the development of a prognosis, plan of care and intervention strategies.
   1.2.12 Identify and prioritize body function and structure impairments to determine specific activity limitations towards which interventions will be directed.
1.2.12.1 Recognize the various levels of structural impairments based on electrophysiological findings.

1.2.13 Make a referral to another physical therapist, other health care practitioner or agency when physical therapy is not indicated or the patient/client's needs are beyond the skills, expertise and/or scope of practice of the physical therapist practitioner.

1.2.13.1 Recognize electrophysiological findings that warrant referral to the appropriate health care professional.

1.2.14 Determine the need for additional information and utilize technological search mechanisms to find that information.

1.2.15 Adapt delivery of physical therapy services with consideration for patients' differences, values, preferences and needs.

1.5 Demonstrate effective verbal and written communication skills with patients, families, other health care professionals, and the public, to facilitate interventions and interdisciplinary interactions and cooperation.

1.5.1 Determine appropriate documentation for the recording of patient/client information consistent with professional standards, the fiscal intermediary, and the treatment setting.

1.5.1.1 Properly document electrodiagnostic examination findings.

1.5.2 Produce quality documentation in a timely manner to support the delivery of physical therapy services.

1.8 Provide consultative services applying the unique knowledge and skills of a physical therapist to identify problems, recommend solutions, or produce an outcome or product.

**Goal 2.0 Demonstrate Professional Behaviors**

2.4 Recognize the need for personal and professional development.

2.4.2 Welcome and seek new learning opportunities.

2.4.2.1 Recognize the opportunity and requirements for attaining a board certification in clinical electrophysiology.

2.5 Demonstrate entry level generic abilities, including:

2.5.1 Professional accountability and commitment to learning.

2.5.1.1 Recognition of one's own limitations.

2.5.1.2 Effective use of constructive feedback.

2.5.1.3 Effective use of time and resources.

2.5.1.4 Demonstrate integrity, compassion, and courage in all interactions.

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

3.1 Practice physical therapy in a manner consistent with established legal and professional standards.

3.1.1 Demonstrate awareness of and adherence to state licensure regulations.

3.1.2 Practice within all applicable regulatory and legal requirements.

3.1.2.1 Demonstrate knowledge of the laws and regulations pertaining to practicing as a board certified clinical electrophysiologist.

**Goal 4.0: Demonstrate Scholarship**

4.1 Adhere to all applicable state and federal laws.

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

4.1.3.1 Evaluate the efficacy and effectiveness of electrotherapeutic modalities.

4.1.4 Read, critique, and interpret professional literature.

4.1.4.1 Read, critique, and interpret professional literature on modalities.

4.2 Contribute to the body of knowledge of physical therapy.

4.2.1 Participate in, plan and/or conduct clinical, basic, or applied research.
4.2.1.1 Participate in, plan and/or conduct clinical, basic, or applied research with modalities.
4.2.1.2 Disseminate the results of modality research.

TEACHING STRATEGIES AND LEARNING ACTIVITIES
1. Combination of lecture and laboratory demonstrations
2. Practice therapeutic techniques
3. Assigned readings
4. Video presentations
5. Problem solving group discussions
6. Case studies and soap notes

ATTENDANCE
Daily attendance and timeliness is expected. Courtesy and professional responsibility requires notification of the instructor for any absence in advance. Failure to notify the professor of an absence can result in lowering your participation grade and is considered unprofessional. Students are responsible for any missed work and may be required to complete make-up assignments.

LAB ATTIRE:
Shorts and bathing suit top or sport bra for females. Shorts for males. These clothes should be available for every lab class.

ACADEMIC HONESTY
The university policy regarding academic honesty is in effect in this course and any alleged violations will be handled in accordance with the policies described in the University Catalogue. (www.csus.edu/admbus/umanual/UMA00150.htm)

BEHAVIORAL EXPECTATIONS
Students are responsible for appropriate behaviors as defined by the generic abilities. Failure to comply with behavioral expectations during class may result in a student first being warned that behavior is inappropriate, then, if inappropriate behavior continues, a student may be asked to leave a class. Repeated failure to comply with behavioral expectations can lead to failure in the course. Cell phones and beepers should be off or silent (set to vibration mode) during the class. No text messaging is permitted in class.

SPECIAL ACCOMMODATIONS
During the course of the year, some students may utilize prearranged accommodations. If you are a student with a learning disability, physical disability, or other special needs, please let me know as soon as possible if you need special accommodation. These kinds of confidential discussions are best handled during my office hours or by special appointment. You can expect confidentiality and cooperation regarding any circumstances and needs that have been verified though the Office of Services to Students with Disabilities (SSWD) Lassen Hall 1008, (916) 278-6955.
ASSESSMENT/ ASSIGNMENTS

Assessments:
Describe the theory and practice of electromyographic and nerve conduction velocity testing 20%
Correctly perform electromyographic testing 20%
Correctly interpret the results of electromyographic testing 20%
Correctly perform nerve conduction velocity testing 20%
Correctly interpret the results of nerve conduction velocity testing 20%

GRADING
A = 90% - 100%
B = 80% - 89%
C = 70% - 79%
D = 60% - 69%
F = < 60%

Please note that this syllabus may be changed at any time at the discretion of the Instructor with prior notification of students.
This course replaces experimental course Subject Area (prefix) and Catalog Nbr (course number):

<table>
<thead>
<tr>
<th>Subject Area (prefix) &amp; Catalog Nbr (course no.)</th>
<th>Title:</th>
<th>Units:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT260</td>
<td>Graduate Physical Therapy Seminar I</td>
<td>1 - 2</td>
</tr>
</tbody>
</table>

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.

This course is being changed as part of the curriculum changes with the new DPT program required for continued accreditation for the program. The course reflects the expectations of advanced practice opportunities in a doctoral program. This seminar option within PT 660A-G addresses the development of more advanced clinical skills in neuropsychiatrics.

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

This seminar laboratory experience focuses on pediatric patient management. The lab will allow students to research and apply evidence-based practice and gain advanced hands-on practice in pediatric physical therapy. This course is best suited for students planning a career in pediatric patient management. The course satisfies one of two requirements for selected seminars in the curriculum. Open to Physical Therapy Majors Only.

Prerequisite:
- BIO 633 Human Gross Anatomy for Physical Therapists
- PT 600 Pathokinesiology
- PT 608 PT/Patient/Professional Interactions
- PT 630 Pathophysiology
- PT 602 Evidence Informed Practice I
- PT 604 Principles of Human Movement
- PT 606 Therapeutic Measurements and Techniques
- PT 614 Neuroscience for Physical Therapists
- PT 618 Foundations for Patient Management
- PT 620 Physical Therapy Interventions I
- PT 622 Evidence Informed Practice II
- PT 632 Pharmacology for Physical Therapists
- PT 634 Diagnostic Imaging for Physical Therapists
- PT 636 Geriatrics/Gerontology for Physical Therapists
- PT 638 Health, Wellness and Ergonomics in Physical Therapy
- PT 624 Adult Neuromuscular Patient Management I
- PT 625 Musculoskeletal Patient Management I
- PT 626 Clinical Agents
- PT 640 Physical Therapy Interventions II
- PT 646 Acute Care and Cardiopulmonary Physical Therapy
- PT 627 Physical Therapy Educator
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
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<tbody>
<tr>
<td>PT 644</td>
<td>Adult Neuromuscular Patient Management II</td>
</tr>
<tr>
<td>PT 645</td>
<td>Musculoskeletal Patient Management II</td>
</tr>
<tr>
<td>PT 648</td>
<td>Health Care Delivery in Physical Therapy I</td>
</tr>
<tr>
<td>PT 669</td>
<td>Psychosocial Issues in Physical Therapy</td>
</tr>
<tr>
<td>PT 662</td>
<td>Differential Diagnosis in Physical Therapy</td>
</tr>
<tr>
<td></td>
<td>Enforced at Registration: Yes <em>x</em> No ___________</td>
</tr>
</tbody>
</table>

**Corequisite:**
- PT 663 Integumentary Patient Management
- PT 665 Musculoskeletal Patient Management III
- PT 664 Neuropediatric Patient Management
- PT 668 Health Care Delivery in Physical Therapy II
- PT 680 Graduate Physical Therapy Seminar
- PT 690 Doctoral Project/Culminating Experience

**CO-REQUISITES**

<table>
<thead>
<tr>
<th>Enforced at Registration: Yes ___ No <em>x</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Graded: Letter <em>x</em> Credit/No Credit___</td>
</tr>
</tbody>
</table>

**Course Classification (e.g., lecture, lab, seminar, discussion):** Seminar C-05

**Instructor Approval Required?** Yes ___ No _x_ __

<table>
<thead>
<tr>
<th>Cross Listed?</th>
<th><strong>If yes, do they meet together and fulfill the same requirement, and what is the other course.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes ___ No <em>x</em></td>
<td></td>
</tr>
</tbody>
</table>

**How Many Times Can This Course be Taken for Credit?** __once__

**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](http://www.csus.edu/acaf/example.htm)

This course is an elective available to upper class students who have taken PT624 and PT644. Students will gain additional laboratory experience working with pediatric patients with movement problems due to neurologic damage or delayed development. At the completion of this course the student will be able to:

**Goal 1.0 Demonstrate Professional Effectiveness**

<table>
<thead>
<tr>
<th>1.1</th>
<th>Compare and contrast normal biological, physiological, and psychological mechanisms of the human body with pathophysiological factors that lead to impaired body functions and structure.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1</td>
<td>Discuss the etiology and clinical features of major disorders.</td>
</tr>
<tr>
<td>1.1.2</td>
<td>Describe how pathological processes affect normal function.</td>
</tr>
<tr>
<td>1.1.2.1</td>
<td>Compare and contrast the characteristics (voluntary strength, atrophy, response to muscle stretch, tone, abnormal movements, sensation and electrical findings) for lesions affecting the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the central nervous system and the myoneural junction.</td>
</tr>
<tr>
<td>1.1.2.2</td>
<td>Describe the neuroanatomical structure and functioning of and the clinical implications of lesions or disorders affecting the somatosensory system.</td>
</tr>
<tr>
<td>1.1.2.3</td>
<td>Describe the neuroanatomical structure and functioning of and the clinical implications of lesions or disorders affecting the motor system.</td>
</tr>
<tr>
<td>1.1.2.4</td>
<td>Describe the neuroanatomical structure and functioning of and the clinical implications of lesions or disorders affecting the peripheral nervous system.</td>
</tr>
<tr>
<td>1.1.2.5</td>
<td>Describe the neuroanatomical structure and functioning of and the clinical implications of lesions or disorders affecting the cranial nerves.</td>
</tr>
<tr>
<td>1.1.2.6</td>
<td>Describe the neuroanatomical structure and functioning of and the clinical implications of lesions or disorders affecting the cerebrum.</td>
</tr>
<tr>
<td>1.1.2.7</td>
<td>Describe the neuroanatomical structure and functioning of and the clinical implications of lesions or disorders affecting the blood supply of the central nervous system.</td>
</tr>
<tr>
<td>1.1.2.8</td>
<td>Describe the neuroanatomical structure and functioning of and the clinical implications of lesions or disorders affecting the myoneural junction.</td>
</tr>
<tr>
<td>1.1.3</td>
<td>Discuss common medical/surgical treatments for major disorders.</td>
</tr>
<tr>
<td>1.1.3.1</td>
<td>Discuss common medical/surgical treatments for a patient client with disorders of somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply of the CNS and the myoneural junction.</td>
</tr>
<tr>
<td>1.1.4</td>
<td>Analyze the effects of pharmacological agents on human function.</td>
</tr>
</tbody>
</table>

**Goal 1.2 Determine the physical therapy needs of any individual seeking services.**

| 1.2.1 | Perform an effective and efficient systems review screen. |
| 1.2.2 | Review pertinent medical records and conduct a comprehensive patient interview. |
| 1.2.3 | Carry out appropriate and comprehensive patient examinations including tests and measures in a safe and client-centered manner. |
| 1.2.3.1 | Apply knowledge of the neuroanatomy and pathophysiology of disorders of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply of the CNS and the myoneural junction to the physical therapy evaluation. |
| 1.2.3.2 | Select and interpret the results from common measurement tools used in assessing patients/clients with disorders of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction to the physical therapy evaluation. |
| 1.2.3.3 | Perform an evaluation of a patient/client with a disorder of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction. |
| 1.2.3.4 | Determine the need for additional information and utilize technological search mechanisms to find that information. |

**Goal 1.4 Determine, with each patient encounter, the patient's need for further examination or consultation.**

| 1.2.4 | Perform a physical therapy patient examination using evidenced-based tests and measures. |
| 1.2.5 | Utilize available evidence in interpreting examination findings to inform the patient evaluation. |
| 1.2.6 | Evaluate data from the patient examination (history, systems review, tests and measures) to make clinical judgments. |
| 1.2.7 | Synthesize available data on a patient using the concepts and terminology of the most recent disability/enability theoretical construct (currently the International Classification of Functioning, Disability, and Health (ICF) Model of Functioning and Disability). |
| 1.2.8 | Cite the evidence (patient history, diagnostic test results, tests, measures, and scientific literature) to support clinical decisions. |
| 1.2.10 | Evaluate and interpret the results of examination findings to classify the patient problem using the most recently adopted diagnostic taxonomy (currently the Guide to Physical Therapist Practice’s labels and practice patterns). |
| 1.2.11 | Integrate and evaluate data that are obtained during the examination to describe the patient condition in terms that will guide the prognosis, the plan of care and intervention strategies. |
| 1.2.12 | Identify and prioritize body function and structure impairments to determine specific activity limitations towards which interventions will be directed. |
1.2.13 Make a referral to another physical therapist, other health care practitioner or agency when physical therapy is not indicated or the patient/client's needs are beyond the skills, expertise and/or scope of practice of the physical therapist practitioner.

1.2.15 Determine the need for additional information and utilize technological search mechanisms to find that information.

1.2.16 Adapt delivery of physical therapy services with consideration for patients' differences, values, preferences and needs.

1.3 Develop a plan of care based on the best available evidence and that considers the patient's personal and environmental factors.

1.3.1 Prioritize patient/client problems taking into consideration the patient/client's needs and goals, health condition, physiological and biological mechanisms within the constraints of the environment and resources.

1.3.1.1 Apply knowledge of the pathophysiology of disorders of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction to the physical therapy plan of care.

1.3.1.2 Integrate knowledge of common surgical procedures performed on clients with disorders of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction into the physical therapy care plan.

1.3.1.3 Develop a problem list based on your evaluation of the patient/client with disorders of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction.

1.3.1.4 Prioritize the problems list in preparation for the development of goals and the plan of care.

1.3.1.5 Based on the evaluation and in conjunction with the patient/client, design a cost-effective plan of care for a patient/client with a disorder of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction.

1.3.2 Write measurable, functional goals that are time referenced with expected outcomes.

1.3.3 Determine a patient prognosis by predicting the level of optimal improvement in function and the amount of time required to achieve that level.

1.3.4 Recognize barriers that may impact the achievement of optimal improvement within a predicted time frame.

1.3.5 Select and prioritize the essential interventions that are safe, meet the specified functional goals and outcomes and are patient-centered.

1.3.5.1 Evaluate the patient's/client's need for an assistive device and/or orthosis

1.3.5.2 Evaluate the fit and function of an assistive device and/or orthosis

1.3.6 Identify and collaborate with others needed in implementing the plan of care.

1.3.7 Articulate a specific rationale for referrals made to other providers.

1.3.8 Progress the plan of care by making ongoing adjustments to interventions.

1.3.8.1 Construct short and long term goals that address the problems identified in the evaluation, taking into consideration the patient's/client's needs and goals, pathophysiology and biological mechanisms within the constraints of the environment and resources.

1.3.9 Include in the plan of care indirect interventions, such as coordination of care, patient/family education, modifications to physical and social environments, and referral to other providers.

1.3.10 Seek and find information using contemporary technology that addresses the specific needs of the patient care plan.

1.3.11 Identify patient needs in terms of discharge planning, discontinuation of care, and transfer of care.

1.4 Implement the physical therapy plan of care designed to restore and/or maintain optimal function applying selected procedural interventions that demonstrate safe and effective psychomotor and clinical reasoning skills.

1.4.1 Perform efficient and effective procedural interventions utilizing evidence-informed physical therapy procedures in a competent manner.

1.4.1.1 Apply knowledge of the pathophysiology of disorders of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction to the therapeutic intervention.

1.4.1.2 Demonstrate a therapeutic exercise program for a patient/client with a disorder of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction.

1.4.1.3 Select and adjust the appropriate equipment to enhance the patient's/client's mobility and function in relation to the treatment goals, including, but not limited to orthotics, wheelchairs and wheelchair accessories and other durable medical equipment

1.4.2 Modify or redirect selected procedural interventions in light of reexaminations and/or patient/client's response to interventions.

1.4.2.1 Modify the environment (with the permission of the patient/client) to facilitate effective therapeutic intervention and optimal function.

1.4.2.2 Modify the physical therapy program in light of psychosocial and socioeconomic aspects associated with a patient/client with a patient/client with a disorder of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction.

1.4.2.3 Instruct a patient/client with a disorder of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction in the use of medical equipment.

1.4.3 Instruct the patient/client or caregiver in exercises, postures, handling techniques, home exercises consistent with patient/client diagnosis, prognosis, and expected outcomes, to facilitate patient/client progress, to maintain patient/client status, or to slow deterioration.

1.4.3.1 Teach a patient/client with a disorder of the somatosensory system, motor system, peripheral nervous
system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction to perform functional activities.

1.4.3.2. Teach the family or caregivers of a patient/client with a disorder of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction in assisting the patient/client with a home program.

1.4.3.3. Modify the environment (with the permission of the patient/client) to facilitate effective therapeutic intervention and optimal function.

1.4.3.4. Instruct the patient’s/client’s family or caregivers in the physical management (transfers, dressing, bathing, etc.) of the patient/client.

1.4.3.5. Instruct a patient with a disorder of the somatosensory system, motor system, peripheral nervous system, cranial nerves, cerebrum, blood supply to the CNS and the myoneural junction in the use of medical equipment.

1.4.4 Assess patient/client progress towards goals/projected outcomes.

1.4.5 Coordinate patient/client care with other health care providers.

1.5 Demonstrate effective verbal and written communication skills with patients, families, other health care professionals, and the public, to facilitate interventions and interdisciplinary interactions and cooperation.

1.5.1 Determine appropriate documentation for the recording of patient/client information consistent with professional standards, the fiscal intermediary, and the treatment setting.

1.5.2 Produce quality documentation in a timely manner to support the delivery of physical therapy services.

1.5.3 Demonstrate thorough, concise documentation consistent with current language from the Patient Management Model contained in the most recent edition of the Guide to Physical Therapist Practice.

1.5.3.1 Prepare a written case report documenting: PT examination (including evidence for tests and measures used), PT evaluation, PT diagnosis, prognosis and plan of care (Long- and Short-term goals), intervention (including evidence for interventions used, daily notes, home evaluation, and home exercise plan), and outcomes including (intake and discharge data, and evaluation of treatment effectiveness).

1.5.4 Communicate efficiently and effectively with other health care providers involved in the patient/client’s management.

1.5.4.1 Communicate effectively with the patient/client and caregivers (2.2.1, 2.2.2, 2.2.3, & 2.2.4.)

1.5.4.2 Communicate with other members of the rehabilitation team, including but not limited to the MD, RN, OT, SLP, PTA, PT aide, psychologist, and neuropsychologist.

1.6 Utilize data from selected outcome measures to document intervention effectiveness.

1.6.1 Select relevant outcome measures for levels of body functions and structural impairments, activities and participation with respect for their psychometric properties.

1.6.2 Collect relevant evidenced-based outcome measures that relate to patient/client goals and/or prior level of function.

1.6.3 Describe how aggregate data is analyzed to assess the effectiveness of clinical performance (interventions).

1.7 Determine an appropriate discharge, discontinuation of service, or transfer of care plan for patients/clients.

1.7.1 Re-examine patients/clients to determine if continued physical therapy services are indicated.

1.7.2 When a patient/client has reached optimal goals with physical therapy interventions and, when other related services are still needed, seek resources and/or consult with others to identify alternative resources.

1.7.3 Determine needed resources for patients/clients to ensure timely discharge, including follow-up care.

1.7.4 Discontinue care when physical therapy services are no longer indicated.

1.8 Provide consultative services applying the unique knowledge and skills of a physical therapist to identify problems, recommend solutions, or produce an outcome or product.

1.9 Engage in education activities consistent with imparting information and knowledge unique to the expertise of physical therapists to individuals or groups using relevant and effective teaching methods.

1.9.1 Promote health behaviors through educational interventions and modeling.

1.9.2 Apply basic educational concepts of teaching to the practice of physical therapy.

1.9.3 Educate colleagues and other health care professionals about the roles, responsibilities and academic preparation of the physical therapist and scope of physical therapy practice.

1.9.4 Present topics/issues using current evidence and sound teaching principles (i.e. case studies, in-service, journal article review, etc).

1.10 Demonstrate the ability to plan, organize, administer, direct, and supervise human and fiscal resources for physical therapy practice management, including:

1.10.1 Billing and reimbursement.

1.10.2 Electronic medical records documentation.

1.10.3 Contemporary electronic communication.

1.10.4 Direction and supervision of support personnel, including Physical Therapist Assistants (PTAs) and aides.

1.10.5 Patient rights, consent, confidentiality and the Health Information Portability and Privacy Act (HIPPA).

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.

2.1.1 Practice physical therapy demonstrating cultural competence with all individuals and groups.

2.1.2 Work effectively with challenging patients.

2.1.3 Respect personal space of patients/clients and others.

2.1.4 Demonstrate behaviors that are non-judgmental with regards to patients/clients’ lifestyles.

2.1.5 Respect roles of support staff and delegate appropriately.

2.2 Communicate effectively for varied audiences and purposes.
2.2.1 Demonstrate effective interpersonal (verbal, nonverbal, electronic) communication skills considering the diversity of populations and environments.
2.2.2 Facilitate therapeutic communication and interpersonal skills.
2.2.3 Discuss difficult issues with sensitivity and objectivity.
2.2.4 Appropriately utilize communication technology efficiently, professionally, and effectively.
2.2.5 Respect roles of support staff and communicate appropriately.

2.3 Participate in professional activities that serve the community and advance the profession of physical therapy.
2.3.1 Participate in community service activities.
2.3.2 Recognize the importance of participation in professional association activities.
2.3.3 Recognize one's role as a member and leader of the health care team.
2.3.4 Promote participation in clinical education.

2.4 Recognize the need for personal and professional development.
2.4.1 Participate in self-assessment to improve clinical and professional performance.
2.4.2 Welcome and seek new learning opportunities.
2.4.3 Assume responsibility for professional lifelong learning.
2.4.4 Accept responsibility and demonstrate accountability for professional decisions.
2.4.5 Recognize own biases and suspend judgments based on biases.

2.5 Demonstrate entry level generic abilities, including:
2.5.1 Professional accountability and commitment to learning.
2.5.1.1 Recognition of one's own limitations.
2.5.1.2 Effective use of constructive feedback.
2.5.1.3 Effective use of time and resources.
2.5.1.4 Demonstrate integrity, compassion, and courage in all interactions.

Goal 3.0 Practice in an Ethical and Legal Manner

3.1 Practice physical therapy in a manner consistent with established legal and professional standards.
3.1.1 Demonstrate awareness of and adherence to state licensure regulations.
3.1.2 Practice within all applicable regulatory and legal requirements.
3.1.3 Demonstrate the ability to search and find information about laws and regulations pertaining to physical therapy practice from state and federal electronic sources.
3.1.4 Demonstrate accountability by adhering to laws and regulations governing physical therapy fiscal management.

3.2 Practice in a manner consistent with the professional code of ethics
3.2.1 Demonstrate knowledge and application of ethical decision-making.
3.2.2 Treat patients/clients within scope of practice, expertise and experience.
3.2.3 Seek informed consent from patients/clients.

Goal 4.0 Demonstrate Scholarship

4.1 Apply basic principles of statistics and research methodologies within the practice of physical therapy.
4.1.1 Formulate and reevaluate positions based on the best available evidence.
4.1.2 Evaluate the efficacy and efficiency of physical therapy procedural interventions.
4.1.3 Critically evaluate and interpret professional literature as it pertains to practice, research, and education.
4.1.4 Utilize contemporary technology consistently to access evidence.

4.2 Contribute to the body of knowledge of physical therapy.
4.2.1 Participate in, plan, and/or conduct clinical, basic, or applied research.
4.2.2 Disseminate the results of scholarly activities.

**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:

### ASSESSMENT

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Assignment 1: Pediatric Intervention presentation</td>
<td>20</td>
</tr>
<tr>
<td>Assignment 2: Rough draft of evaluation</td>
<td>20</td>
</tr>
<tr>
<td>Assignment 3: Final version of evaluation</td>
<td>40</td>
</tr>
<tr>
<td>Assignment 4: Home exercise program</td>
<td>20</td>
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<tr>
<td>Participation Clinic</td>
<td>20</td>
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**Total 120 points**

### GRADING PERCENTAGES:

<table>
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<tr>
<th>Percentage (%)</th>
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<tbody>
<tr>
<td>≥ 93</td>
<td>A</td>
</tr>
<tr>
<td>90 – 92.9</td>
<td>A-</td>
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<tr>
<td>Score Range</td>
<td>Grade</td>
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<td>------------</td>
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<tr>
<td>87 - 89.9</td>
<td>B+</td>
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**For whom is this course being developed?**

- Majors in the Dept _x_
- 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 _x_ No __ 2 sections of PT660A-G

If yes, identify program(s): DPT

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 _x_

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.*

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**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.

<table>
<thead>
<tr>
<th>Signatures:</th>
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<tr>
<td>Department Chair:</td>
<td>9/22/11</td>
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<tr>
<td>College Dean or Associate Dean:</td>
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<td>CPSP (for school personnel courses ONLY)</td>
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<tr>
<td>Associate Vice President and Dean for Academic Programs</td>
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**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.

9/10/2008
CALIFORNIA STATE UNIVERSITY, SACRAMENTO
College of Health and Human Services
Department of Physical Therapy

PT 660E-NeuroPediatric Laboratory

Spring Semester

COURSE CREDIT: 2 units

INSTRUCTORS: TBA

LOCATION: TBA

TIME: TBA

OFFICE HOURS:

COURSE DESCRIPTION:

This seminar laboratory experience focuses on pediatric patient management. The lab will allow students to research and apply evidence-based practice and gain advanced hands-on practice in pediatric physical therapy. This course is best suited for students planning a career in pediatric patient management. The course satisfies one of two requirements for selected seminars in the curriculum. Open to Physical Therapy Majors Only.

PREREQUISITES:

- BIO633 Applied Musculoskeletal Anatomy for PT's
- PT 600 Pathokinesiology
- PT 602 Research Methods in Physical Therapy I
- PT 604 Principles of Human Movement
- PT 606 Therapeutic Measurements & Techniques I
- PT 608 PT/Patient/Professional Interactions
- PT 620 Therapeutic Exercise I
- PT 622 Research Methods in Physical Therapy II
- PT 624 Neurological Evaluation & Treatment I
- PT 644 Neurological Evaluation &Treatment II
- PT 625 Musculoskeletal Evaluation & Treatment I
- PT 626 Clinical Agents
- PT 695A Clinical Practicum I
- PT 640 Therapeutic Exercise II
- PT 645 Musculoskeletal Evaluation & Treatment II
- PT 648 Health Care Delivery in Physical Therapy I
- PT 690 Doctoral Project/Culminating Experience

CO-REQUISITES:

- PT 660 Graduate Physical Therapy Seminar I
- PT 664 Neuropediatric Physical Therapy
PT 665 Musculoskeletal Evaluation & Treatment III
PT 666 Therapeutic Measurements & Techniques II
PT 667 Physical Therapy Educator
PT 668 Health Care Delivery in Physical Therapy II

REQUIRED TEXT:

RECOMMENDED TEXTS:
Louis, Bly. Motor Skills Acquisition in the First Year, San Antonio, Tx, Therapy Skill builders. 1994


Long, Toby. Handbook of Pediatric Physical Therapy 2nd ed, Baltimore, MA. Lippincott Williams & Wilkins


COURSE OBJECTIVES:

At the conclusion of the course, the students will:

**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.

   a. Compare and contrast the characteristics of preterm and full term neonates including postural tone, behavioral state, and signs of self-regulation and stress.
   b. Apply the pathophysiology of pediatric neuromuscular disorders to physical therapy interventions.
   c. Interpret how common medications will affect a patient's participation in and response to physical therapy activities.
   d. Discuss common feeding disorders seen in children with neuromuscular disorders, including the pathophysiology of the disorders, the risks associated with them, and basic approaches to management.
   e. Integrate knowledge of common surgical procedures performed on children with neuromuscular disorders into the physical therapy plan of care.

1.2 Determine the physical therapy needs of any individual seeking services.

   a. Apply knowledge of the developmental sequence in the following areas to the examination and treatment of pediatric patients. (Also under 1.4)
   a.1 Gross motor
   a.2 Fine motor
   a.3 Oral motor
   a.4 Speech
a.5 Play
b. Select and interpret the results from common measurement tools used in assessing the pediatric population including but not limited to:
   b.1 neonatal behavioral assessments
   b.2 standardized developmental tests
   b.3 functional/disability measures
c. Perform an examination of a normal child using a standardized developmental test.
d. Perform an examination of a child with a neuromuscular disability, both from a videotaped case study and on a client in the clinical lab sessions.
e. Determine the need for additional information and utilize technological search mechanisms to find that information.

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.

a. Develop a problem list based on your evaluation of the pediatric client.
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 family’s needs.
c. Develop objectives for an IEP or IFSP in collaboration with the special education team and the family based on case studies presented in class.
d. Design a cost-effective plan of care based on your evaluation a child with a neuromuscular disability, selecting appropriate physical therapy interventions.
e. Seek and find information using contemporary technology that addresses the specific needs of the patient plan of care.

1.4 Implement 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.

a. Demonstrate a therapeutic exercise program for the pediatric client with a neuromuscular disorder.
b. Select the appropriate equipment to enhance the child’s mobility and function in light of your treatment goals, including but not limited to
   b.1 orthotics
   b.2 wheelchairs and wheelchair accessories
   b.3 durable medical equipment such as positioning, bathing and gait devices
c. Instruct a child with a neuromuscular disorder in the use of a wheelchair.
d. Teach a child with a neuromuscular disorder to perform functional activities.
e. Teach parents or other caregivers how to perform a home exercise and positioning program for their child with a neuromuscular disability.
f. Instruct parents and other caregivers in the physical management (carrying, dressing, feeding, bathing, etc.) of their child with a neuromuscular disorder.
g. Modify the physical therapy program in light of the psychosocial and socioeconomic aspects associated with 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.

a. Document the results of your examination, plan of care, and intervention program for both a normal child and the child with a neuromuscular disorder.

b. Communicate effectively with children and their families. (also under 2.2)

c. Communicate with other members of the rehabilitation team, including but not limited to the MD, CPO, RN, OT, SLP, PTA, teacher, and aides. (also under 2.2)

d. Adapt communication methods for children with speech disorders, including the use of alternative and augmentative communication methods. (also under 2.2)

1.6 Determine the appropriate discharge and follow-up plan for patients/clients.

a. Determine when the child has reached optimal goals with physical therapy interventions, or when therapy is no longer indicated by case study.

1.7 a. Provide rationales for decisions made in your management of the child with a neuromuscular disorder.

b. Access and evaluation information via contemporary technology to determine value and application for the specific presenting problem.

**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.

a. Demonstrate appropriate behaviors in class, laboratory and clinical sessions as defined by the generic abilities.

2.2 Communicate effectively for varied audiences and purposes.

See 1.5 b, c, and d

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

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

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

3.2 Abide by the APTA code of ethics.

3.3 Adhere to all applicable state and federal laws.

3.3.1 Demonstrate the ability to search and find information about laws and regulations effecting physical therapy practice from state and federal electronic sources.

**Goal 4.0:** Demonstrate Scholarship

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

a. Critique the literature in selected controversial topics in pediatric rehabilitation following the standards of the project assignment sheet.
TEACHING STRATEGIES AND LEARNING ACTIVITIES:

Lecture, demonstration, reading assignments, AV materials, guest lecturers, large and small group discussion, laboratory practice, field trips, and written projects.

ASSIGNMENTS:

1. Each student will complete a rough draft of an evaluation and treatment plan for a child with a neuromuscular disorder.
2. Each student will complete a final version of an evaluation and treatment plan for a child with a neuromuscular disorder.
3. Each student will present a pediatric topic and present to the class via PowerPoint presentation. This will require literature search and discussion of given topic.
4. Each student will complete a home program for a child with a neuromuscular disorder.

POINTS POSSIBLE:

Assignment 1: Pediatric Intervention presentation 20 points
Assignment 2: Rough draft of evaluation 20 points
Assignment 3: Final version of evaluation 40 points
Assignment 4: Home exercise program 20 points
Participation Clinic 20 points

Total 120 points

GRADING PERCENTAGES:

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If you disagree with the scoring of a question, submit a written request for reconsideration with the appropriate reference to justify your answer within 2 working days of receiving your quiz.

Daily attendance is expected. Excused absences (personal or family illness, car problems, and inclement weather) should be reported to the instructor prior to class or as soon thereafter as possible. Unexcused absences will result in reduction of participation points.
PROFESSIONAL CONDUCT:

Students enrolled in the physical therapy program are expected to conduct themselves in a professionally acceptable manner that includes refraining from academic or professional dishonesty. This includes cheating and plagiarism in academic assignments. Such offenses will result in prompt disciplinary action.

Students are responsible for appropriate behaviors as defined by the generic abilities. Failure to comply with behavioral expectations during class or lab may result in a student first being warned that behavior is inappropriate, then, if inappropriate behavior continues, a student may be asked to leave a class or lab. Repeated failure to comply with behavioral expectations can lead to failure in the course.

Special accommodations: During the course of the year, some students may utilize prearranged accommodations. If you are a student with a learning disability, physical disability, or other special needs, please let an instructor know as soon as possible if you need special accommodation. These kinds of confidential discussions are best handled during office hours by appointment. You can expect confidentiality and cooperation regarding any circumstances and needs that have been verified though the disabilities center on campus.

Please note that this syllabus may be changed at any time at the discretion of the instructors with prior notification of the students.