COURSE CREDIT:  2 units: 2 lecture hours

INSTRUCTOR:  D. Michael McKeough, PT, EdD
OFFICE:  Solano Hall 4030
OFFICE HOURS:  M 7:30– 8:30, W 11:30 – 1:30
              Others by appointment
TELEPHONE:  278-5055
E-MAIL:  mmckeough@csus.edu
CLASSROOM:  Eureka 109
TIME:  Monday 9:00 – 11:00AM

COURSE DESCRIPTION:  Catalogue
This course focuses on developing an understanding of components of normal movement, contemporary
concepts of motor control, and their application to physical therapy practice. The course includes a review
of the foundations of neuroanatomy for normal movement. Open to Physical Therapy majors only.

CO-REQUISITES:
  Bio 233  Applied Musculoskeletal Anatomy for PTs
  PT 202  Research Methods in Physical Therapy I
  PT 206  Therapeutic Measurements & Techniques I
  PT 208  PT/Patient/Professional Interactions

REQUIRED TEXTS/ REFERENCES:
3. Class Notes and articles as provided on the Homepage
COURSE OBJECTIVES: (Referenced to Program Educational Goals and Related Objectives)

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

**Goal 1.0: Demonstrate Professional Competence**

1.1 Compare and contrast normal biological, physiological, and psychological mechanisms of the human body that result in normal human movement
   1.1.1 Discuss the theories of neural plasticity and recovery of motor function.
   1.1.2 Discuss the neurophysiological basis for postural control
   1.1.3 Discuss lifespan changes in mobility

1.2 Determine the physical therapy needs of any individual seeking services.
   1.2.2 Carry out appropriate examinations in a safe and client-centered manner.
     1.2.2.a Perform a task analysis of normal movement patterns during functional activities.
     1.2.2.b Discuss the scientific basis of motor control as applied to the physical therapy evaluation of the patient with neurologic, pediatric or orthopedic conditions.
     1.2.2.c Discuss the scientific basis of motor learning as applied to the physical therapy evaluation of the patient with neurologic, pediatric or orthopedic conditions.
     1.2.2.d Discuss the scientific basis of postural control as applied to the physical therapy evaluation of the patient with neurologic, pediatric or orthopedic conditions.

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.
   1.4.1 Apply 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 Discuss the scientific basis of motor control as applied to the physical therapy treatment of the patient with neurologic, pediatric or orthopedic conditions.
     1.4.1.b Discuss the scientific basis of motor learning as applied to the physical therapy treatment of the patient with neurologic, pediatric or orthopedic conditions.
       1.4.1.b.i Apply his/her understanding of feedback to the design of a treatment program.
       1.4.1.b.ii Apply his/her understanding of practice to design a treatment program.
     1.4.1.c Discuss the scientific basis of postural control as applied to the physical therapy treatment of the patient with neurologic, pediatric or orthopedic conditions.
     1.4.1.d Discuss the effect of lifespan changes in mobility on treatment planning.

**Goal 2.0: Demonstrate Professional Behaviors**

2.4 Recognize the need for personal and professional growth through self-assessment, self-correction, and self-direction and exhibit a commitment to lifelong learning.
   2.4.2 Assume responsibility for own learning.
     2.4.2.a Assume responsibility for own learning by locating resources in the literature.

2.5 Demonstrate professional responsibility in all interactions.
   2.5.1 Demonstrate dependability.
     2.5.1.a Demonstrate appropriate behaviors in class and lab as defined by the generic abilities. (2.5.2.a., 2.5.3.a., 2.5.4.a., 2.5.5.a., 2.5.6.a. & 2.5.7.a.)
Goal 4.0: Demonstrate Scholarship

4.1 Apply basic principles of statistics and research methodologies within the practice of physical therapy.
   4.1.2 Summarize findings from the literature on motor control and motor learning, and the analysis of human movement.

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 2006-2008 pp98-99. (http://www.library.csus.edu/content2.asp?pageID=175).

Students with Special Needs
If you have a disability and require accommodations, you need to provide disability documentation to SSWD, Lassen Hall 1008, (916) 278-6955. Please discuss your accommodations needs with me after class or during my office hours early in the semester. Please refer to the following university policy for further details (www.csus.edu/mppa/gradmanual/index.htm).

TEACHING STRATEGIES AND LEARNING ACTIVITIES:
Lecture, demonstration, reading assignments, AV materials, large and small group discussion, laboratory practice and movement observation.

ASSIGNMENTS: (For details see Assignments on the Homepage)
1. The Motor System: Label the illustrations and complete the tables.
2. Task Analysis: For a given therapeutic activity describe the regulatory conditions for the individual, task, and performance environment.
3. Write a position paper describing your conceptual framework for clinical practice (see S-C&W Ch 6)
4. Participation summary

There are 4 assignments for the course. Assignments are due in hardcopy at the beginning of class on the assigned date. Without prior approval, late assignments are not accepted and a score of 0 is entered for the assignment.

ASSESSMENT/ ASSIGNMENTS

<table>
<thead>
<tr>
<th>Assessment type</th>
<th>Points</th>
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<tbody>
<tr>
<td>Test 1</td>
<td>40</td>
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<tr>
<td>Test 2</td>
<td>40</td>
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<tr>
<td>Final examination (Cumulative)</td>
<td>65</td>
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<tr>
<td>Assignment 1: Motor System</td>
<td>15</td>
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<tr>
<td>Assignment 2: Task Analysis</td>
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<tr>
<td>Assignment 3: Conceptual Framework</td>
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<tr>
<td>Assignment 4: Class participation</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
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There are 3 scheduled exams during the semester. For excused absences ONLY, make-up exams are available through the University Testing Center with a 10 point penalty due to additional study time.

**GRADING SCALE:**

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<thead>
<tr>
<th>Grade</th>
<th>Percent</th>
<th>Points</th>
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<tbody>
<tr>
<td>A</td>
<td>93 –100%</td>
<td>186-200</td>
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<tr>
<td>A-</td>
<td>90 – 92%</td>
<td>180-185</td>
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<td>B+</td>
<td>87 - 89%</td>
<td>174-179</td>
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<tr>
<td>B</td>
<td>83 – 86%</td>
<td>166-173</td>
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<tr>
<td>B-</td>
<td>80 – 82%</td>
<td>160-165</td>
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<tr>
<td>C+</td>
<td>76 – 79%</td>
<td>154-159</td>
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<tr>
<td>C</td>
<td>73 – 76%</td>
<td>146-153</td>
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<tr>
<td>C-</td>
<td>70 – 72%</td>
<td>140-145</td>
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<tr>
<td>D</td>
<td>60 - 69%</td>
<td>194-200</td>
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<tr>
<td>F</td>
<td>59% &amp; below</td>
<td>186-193</td>
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**PROFESSIONAL CONDUCT:**

Generic Abilities are enforce in this course.

Students are expected to maintain a full attendance. Absences related to illness should be reported to the instructor on the morning of the day of the absence. Failure to report absences are viewed as non-professional conduct and will result in loss of participation points.

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 the 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.

**Furlough Days**

Due to the massive budget cuts in the State of California, CSUS faculty have been furloughed for 8 days per semester. These drastic measures have affected instruction. The course schedule lists classes that have been cancelled due to furloughs.

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