SAN DIEGO STATE UNIVERSITY
DOCTOR OF PHYSICAL THERAPY PROGRAM

DPT 835: NEUROPHYSIOLOGICAL THERAPEUTICS I
Fall 2014
Lecture: Thursday 8:00 – 10:40 am Room PG 174
Lab: Thursday 11:00 am - 1:40pm PG 1520

INSTRUCTORS
Annie Burke-Doe PT, MPT, PhD
Office: DPT 125
Email: aburkedoe@mail.sdsu.edu
Office Hours: Thursday 1:40 pm
Or by appointment

Rosalia Arellano PT, MSPT
Office: DPT 125
Email: marellano@mail.sdsu.edu
Office Hours: Thursday 1:40 pm
Or by appointment

COURSE PREREQUISITES
DPT 726: Clinical Anatomy II
DPT 760: Neuroscience
DPT 801: Clinical Clerkship

COURSE MATERIALS
Required Textbooks:

Recommended Textbooks:

Optional Books:

Required Journal Readings
To be announced during class or on the course blackboard website.

PURPOSE/COURSE OVERVIEW
This course addresses the physical therapy examination, evaluation, diagnosis, prognosis and plan of care (including interventions) for adults with movement problems stemming from dysfunction of the supra-spinal central nervous system. Emphasis will be on Stroke, Parkinson’s disease, Multiple Sclerosis, Amyotrophic lateral Sclerosis, Traumatic Brain Injury and Spinal Cord Injury. Laboratory sessions are taught in parallel with the materials of the course, and will be used to provide students with an opportunity to practice and refine skills related to the evaluation and treatment of neurologic patients. Case studies and small group discussions will be used to encourage integration of the various treatment approaches used in the management of the people with neurological disorders.

PROGRAM GOALS, EXPECTED LEARNING OUTCOMES AND COURSE OBJECTIVES
Given:
• An adult with a movement problem
• All examination and intervention competencies acquired to date relevant to physical therapy.
• A variety of treatment venues

At the completion of DPT 835 NEUROPHYSIOLOGICAL THERAPEUTICS I, students are competent practitioners (program goal P-2, 1.1, 1.2, 2.2, 2.3, 3.1, 3.2.)
1. Describe the pathophysiological effects of lesions to the supra-spinal central nervous system and the major sensory and motor pathways within the central nervous system, explain and related these effects to movement dysfunction. P-2, 1.1; CC- 5.19, 5.20
2. Describe medical and pharmacological management of various diagnoses associated with central nervous system and the major sensory and motor pathways within the central nervous system involvement. P-2, 1.1; CC- 5.19, 5.20
3. Describe patient’s movement dysfunction, associated activity and participation limitations and relevant personal and environmental contextual factors by gathering information from medical chart, patient or significant other interview or observation. CC- 5.19, 5.20
4. Communicate effectively and professionally with the patient, family, caregiver and other individuals involved with the patient’s care. Modify the communication based on the patient’s abilities to receive or express language. CC- 5.17
5. Hypothesize potential components of movement (body structure and function) that are interfering with movement. CC- 5.19, 5.20
6. Identify the stage(s) of movement most affected. CC- 5.19, 5.20
7. Hypothesize the neural, mechanical, physiological and behavioral factors underlying component(s) of movement (and their interaction) in order to develop the initial hypotheses about the cause of the movement dysfunction. CC- 5.19, 5.20
8. Perform a screening examination of sensory and motor systems. CC- 5.27, 5.30
9. Continually assess and determine whether it is advisable to proceed with examination or intervention or identify the need to refer to or consult with another health care practitioner. CC-5.19, 5.20
10. Design and implement a comprehensive physical therapy examination that includes examination of peripheral sensory (light touch, sharp dull, vibration, proprioception) function, motor function, and deep tendon reflex integrity, CC- 5.30
    - Select, prioritize and perform appropriate examination procedures safely, effectively and efficiently. CC- 5.30, 5.49
    - Discuss reliability and validity of selected tests and measures- CC 5.23
    - Modify the examination plan a) if indicated by information gathered during the examination b) based on time constraints c) based on patient response. CC 5.38
    - Accurately summarize examination findings verbally. CC-5.26
    - Accurately document examination findings in writing. C.5.42
11. Based on a synthesis of examination findings, develop and document in writing an evaluation or working hypothesis(es) regarding the patient’s movement that CC- 5.42
    - identifies the location and extent of lesion in the central nervous system CC- 5.19, 5.20
    - describes the underlying reasons for the central nervous system dysfunction CC- 5.19, 5.20
12. Establish a physical therapy diagnosis CC- 5.32
13. Establish a prognosis based on evidence based practice principles CC-5.33
    - prioritize realistic outcomes and short-term goals based on prognosis and personal and environmental contextual factors. CC-5.36
    - determine appropriate recommendations for patient disposition or follow-up
14. Design and implement a physical therapy plan of care based on evidence based principles that is congruent with medical and pharmacologic management CC-5.35
    - Discuss the purpose, theoretical rationale, expected response of any intervention in relation to hypotheses CC- 5.19, 5.20
    - Summarize any existing support in literature for the efficacy of any intervention. CC-5.39
    - Select appropriate interventions. CC-5.39
    - Perform intervention(s) safely, effectively and efficiently. CC-5.39

COURSE GRADING
COURSE EXAMINATIONS / ASSIGNMENTS/ ATTENDANCE: The student is expected to read the text, online units and view the video lecture casts of the course in preparation for activities and examinations.
1. **Lecture Examinations:**
   a. There will be two lecture exams including the final.
   b. The **contents of examinations** will include materials from chapter readings, in class presentations and online activities if applicable and will be based on the stated objectives of the course as well as those of the specific segments of the course content.
   c. **The number of questions** for each examination will be 50 and each question is worth 1 point. Exams may include multiple choices, K-type questions, true /false questions, fill in the blank and matching.
   d. Please see the schedule of learning activities below for dates of assignments and examinations.
   e. **MISSED EXAMINATIONS:** Students are advised to take all examinations when offered since there are no opportunities for a make-up exam with the exception of University-valid reasons, which may require a written note from a physician, and will consist of a free response essay format administered as 4 -10 questions. You will have the same amount of time to complete the exam as your classmates who are taking the regular exam. If you choose to take the makeup exam, you must reserve your place prior to the normal exam time; makeup after-the-fact is permissible only for serious illness and requires a physician’s signed note. To reserve your place, see Dr. Burke-Doe during office hours.

2. **Practical Examination (45 points):**
   a. There will be 1 practical examination to test your ability to perform and interpret results of a neurologic examination on a course/program instructor. You will be asked oral questions related to your clinical judgements based on data gathered during the examination. Please see rubric below. A minimum of 80% proficiency is required on the practical examination. The student is required to meet both safety and technical skill performance competencies. Safety must be met at 100% competency. If a student does not perform the examination in a safe manner, the student will receive an “F” grade for the practical examination; if a student does **not** achieve the standard of competence (80%), the student must re-take the practical exam until competence is achieved, according to the following rules: If the student earns less than 80% on the technical skill performance or less than 100% on the safety, the student may take the practical exam a second time “practical exam retake”. The student must meet both safety (100%) and technical skill performance competencies (80%) to pass the practical “retake”. The grade awarded for the 1st retake practical examination will be 75%. A student who receives an “F” on the “1st retake practical exam” may take a “second retake practical examination” with an additional instructor grading or present with videotaping of the exam. Should the student receives an “F” on the second retake, the student will receive an “F” for that clinical course and practical exam. If the student passes the second practical exam retake (100% safety, 80% technical skill performance), the highest grade awarded on the 2nd retake practical examination is 70%. Remedial work for practical exam may be assigned prior to retaking the practical exam. All practical exams must be completed by the end of the course. You can access your final grade on blackboard. No grades are mailed/email out.

3. **ASSIGNMENTS/ MOTOR LEARNING POWERPOINT VIDEO (25 POINTS):**
   You and two other student (groups of 2-3 only) are asked to create a motor learning PowerPoint video depicting acquisition of a novel motor skill of your choice (examples; juggling, dance sequence, writing your name and address with your non dominant hand, tying a tie) over a 21 day period. The novel skill should be one that requires some practice to improve. Your topic will be selected from a choice of four that you rank in order and must be approved by the course instructor (see motor learning PowerPoint video /topic selection form below). You will also be asked to meet outside of class as a group (4 times) in order determine the motor activity, group member roles, responsibilities, video the motor learning task and to create accountability for each participant. Each individual, not the just the group, is accountable for completion of the task. This will be tracked by completion of the motor learning PowerPoint video collaboration form at each of the 4 required group meetings (see below) and will be submitted with the final PowerPoint/video. The form will describe what each person is doing, what they are accountable for and how they have contributed and will be used to assist with grading the project.
   The topic and partner selection form is due September 4th, 2014 and should be upload to blackboard. The motor learning PowerPoint video must be evidence based and should include the following:
a. Names of team members
b. Title Slide – Motor Learning: YOUR SKILL SELECTION HERE
c. Define Motor Learning
d. Videos of the motor skill being performed at 4 times (initial attempt, day 7, day 14, day 21). This videos can be in any location of the PowerPoint not necessarily all at once.
e. Motor Learning Theories being utilized (read motor control text chapters 1 and 2 to form your plan for motor acquisition of the new skill)
f. Practice level
g. Feedback
h. Practice conditions
i. Modifications made during acquisition
j. Conclusion – how motor learning theory impacts acquisition and recovery of motor function
k. References at end of PowerPoint in AMA format
l. Statement of Permission to use video for educational purposes by students involved
m. Motor learning PowerPoint video will be due at 12:00 midnight PST on October 26th, 2014 uploaded to blackboard (students may utilize U-tube for video storage but a digital copy needs to be provided to instructor). (Please include all meeting forms together in a separate document). Please use the rubric included for details on grading assignment.
n. Please see forms and rubric at the end of the syllabus

4. PATIENT EVALUATION AND WRITTEN DOCUMENTATION (30 points)
You and a group of your peers will evaluate a client with a neurologic disorder and complete a physical therapy evaluation including 1) examination 2) evaluation of data and identification of problems; 3) determination of the physical therapy diagnosis; (4) determination of prognosis and POC. Please see form below.

Course Points:
Exam One: ................................................................. 50
Exam Two: ................................................................. 50
Practical Exam: ......................................................... 45
Motor Learning PowerPoint Video Assignment .................. 25
Patient Evaluation Submission ........................................ 30
Total Course Points ................................................... 200

Exam Review
A review of the examination will be conducted on the first or second class day following the examination at the end of the class. The review will take the following format:
• The instructor will identify questions that more than 50% of the class missed and discuss those in class.
• At the end of the review if any student wishes to review other questions specific to them, they will need to come to office hours to look at their examination booklet. In this way the student gets individualized attention.
• After each review, both the question paper and the score sheet must be handed back to the instructor. Examination questions are extremely confidential and no part of the examination questions is to be reproduced by the student under any circumstances.
• Review of the final examination may take place within the first two weeks of the following semester.
• The instructor is interested in your feedback. What is working, what is not working and how to improve the class. If you have a difficult topic to discuss you are encouraged to come to office hours.
• You can access your final grade and unofficial transcript by logging into blackboard. No grades are mailed out.

GRADING SCALE:
• This course will utilize the following grading scale.

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<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tr>
<td>90-100</td>
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### COURSE SCHEDULE

<table>
<thead>
<tr>
<th>WEEK 1</th>
<th>TIME</th>
<th>TOPIC</th>
<th>FACULTY</th>
<th>READINGS</th>
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<tbody>
<tr>
<td>TH 8/28</td>
<td>8:00-10:40</td>
<td>Course Introduction</td>
<td>Burke-Doe</td>
<td>O’Sullivan – CH 1</td>
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<td>Clinical Decision Making</td>
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<td>Shumway-Cook CH 6</td>
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<tr>
<td>TH 8/28</td>
<td>11:00 – 1:40</td>
<td>Applying the models</td>
<td>Burke-Doe</td>
<td>O’Sullivan – CH 1</td>
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<td>Arellano</td>
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<tr>
<th>WEEK 2</th>
<th>TIME</th>
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<tbody>
<tr>
<td>TH 9/4</td>
<td>8:00-10:40</td>
<td>Neurologic Examination</td>
<td>Burke-Doe</td>
<td>Neuroscience course notes</td>
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<td>Blumenfeld CH 3</td>
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<td>Task analysis</td>
<td>Burke-Doe</td>
<td>O’Sullivan CH 5 pgs. 184-188</td>
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<tbody>
<tr>
<td>TH 9/11</td>
<td>8:00-10:40</td>
<td>Sensory Examination</td>
<td>Burke-Doe</td>
<td>O’Sullivan – CH 3</td>
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<tr>
<td>TH 9/11</td>
<td>11:00 – 1:40</td>
<td>Sensory Examination Lab</td>
<td>Burke-Doe</td>
<td>O’Sullivan – CH 3</td>
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<tr>
<td>TH 9/18</td>
<td>8:00-10:40</td>
<td>Motor Examination</td>
<td>Burke-Doe</td>
<td>O’Sullivan – CH 5</td>
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<td>Cranial Nerve Examination</td>
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<td>TH 9/18</td>
<td>11:00 – 1:40</td>
<td>Motor Examination Lab</td>
<td>Burke-Doe</td>
<td>O’Sullivan – CH 5</td>
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<td>Case Evaluations and Discussions</td>
<td>Arellano</td>
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<tr>
<td>TH 9/25</td>
<td>8:00-10:40</td>
<td>Balance and Coordination</td>
<td>Burke-Doe</td>
<td>O’Sullivan – CH 6</td>
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<tr>
<td>TH 9/25</td>
<td>11:00 – 1:40</td>
<td>Balance and Coordination Lab</td>
<td>Burke-Doe</td>
<td>O’Sullivan – CH 6</td>
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<tr>
<td>TH 10/2</td>
<td>8:00-10:40</td>
<td>Gait</td>
<td>Burke-Doe</td>
<td>O’Sullivan – CH 7, 11</td>
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<tr>
<td>TH 10/2</td>
<td>11:00 – 1:40</td>
<td>Gait and Balance Assessment Lab</td>
<td>Burke-Doe</td>
<td>O’Sullivan – CH 7</td>
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<tr>
<td>TH 10/9</td>
<td>8:00-10:40</td>
<td>Midterm</td>
<td>Burke-Doe</td>
<td>O’Sullivan – CH 5 pgs. 188-192, 394-399</td>
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<td>Shumway-Cook CH 1 &amp;</td>
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<td>Course Activity</td>
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<tr>
<td>TH 10/9</td>
<td>11:00 – 1:40</td>
<td>Motor Control and Motor Learning Intervention Principles</td>
<td>Arellano</td>
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**WEEK 8**

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<th>Time</th>
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<th>Instructor(s)</th>
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<tr>
<td>TH 10/16</td>
<td>8:00-10:40</td>
<td>Practical Exam</td>
<td>Burke-Doe Arellano</td>
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<tr>
<td>TH 10/16</td>
<td>11:00 – 1:40</td>
<td>Practical Exam</td>
<td>Burke-Doe Arellano</td>
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**WEEK 9**

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<th>Time</th>
<th>Course Activity</th>
<th>Instructor(s)</th>
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<tbody>
<tr>
<td>TH 10/23</td>
<td>8:00-10:40</td>
<td>CPTA Conference No Class</td>
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<tr>
<td>TH 10/23</td>
<td>11:00 – 1:40</td>
<td>Online Motor Learning PowerPoint Video Assignment Due October 26th Midnight uploaded on Blackboard</td>
<td>Burke-Doe Arellano</td>
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**WEEK 10**

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<th>Instructor(s)</th>
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<tbody>
<tr>
<td>TH 10/30</td>
<td>8:00-10:40</td>
<td>Stroke, MS, ALS</td>
<td>Arellano O’Sullivan – CH 15, 16, 17</td>
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<tr>
<td>TH 10/30</td>
<td>11:00 – 1:40</td>
<td>Intervention Lab</td>
<td>Burke-Doe Arellano O’Sullivan – CH 15, 16, 17</td>
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**WEEK 11**

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<th>Time</th>
<th>Course Activity</th>
<th>Instructor(s)</th>
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<tbody>
<tr>
<td>TH 11/6</td>
<td>8:00-10:40</td>
<td>PD, TBI</td>
<td>Arellano O’Sullivan – CH 18 &amp; 19</td>
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<tr>
<td>TH 11/6</td>
<td>11:00 – 1:40</td>
<td>Intervention Lab</td>
<td>Burke-Doe Arellano</td>
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**WEEK 12**

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<tbody>
<tr>
<td>TH 11/13</td>
<td>8:00-10:40</td>
<td>SCI</td>
<td>Arellano O’Sullivan – CH 20</td>
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<tr>
<td>TH 11/13</td>
<td>11:00 – 1:40</td>
<td>Intervention Lab</td>
<td>Burke-Doe Arellano</td>
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**WEEK 13**

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<tbody>
<tr>
<td>TH 11/20</td>
<td>8:00-10:40</td>
<td>Patient Examination Day</td>
<td>Burke-Doe Arellano</td>
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<tr>
<td>TH 11/20</td>
<td>11:00 – 1:40</td>
<td>Patient Examination Day</td>
<td>Burke-Doe Arellano</td>
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**WEEK 14**

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<tr>
<td>TH 11/27</td>
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<td>No Classes - Thanksgiving Day</td>
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**WEEK 15**

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<th>Course Activity</th>
<th>Instructor(s)</th>
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<tbody>
<tr>
<td>TH 12/4</td>
<td>8:00-10:40</td>
<td>Final Written Exam</td>
<td>Burke-Doe Arellano</td>
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<tr>
<td>TH 12/4</td>
<td>11:00 – 1:40</td>
<td>Answer Questions for Final Examination /Evaluation</td>
<td>Burke-Doe Arellano</td>
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**WEEK 16**

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<tr>
<td>Finals 12/11-17</td>
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<td>Patient Examination/Evaluation Due on Blackboard by course final date at midnight</td>
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**Course Policies** *(Please refer to the DPT Student Manual for the Professional Behaviors, Class Attendance, Missed Exams and Assignments, Classroom Tardiness, and Attire Policies)*

1. **Mutual Respect:** “The Golden Rule.” Students are expected to treat fellow students and faculty members with the respect that they would like to be shown. A relaxed, professional atmosphere in class with participation
from the students is essential for the learning process. Please ask questions in a respectful manner—questions enhance the total learning experience.

2. **Class Participation**: Participation during class discussions and laboratory activities is necessary and considered an integral part of your learning in the course.

3. **Professional Behaviors**: Successful completion of the course is dependent upon the student’s demonstration of behaviors consistent with those outlined in the *Professional Behaviors* document (see Appendix). Student behaviors that are not consistent with those identified in the *Professional Behaviors* document will be addressed with each student individually. An action plan will be developed for those students who require remediation (a prior version of this document was titled “Generic Abilities”).

4. **Academic Honesty**: Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one’s grade or obtaining course credit; such acts also include assisting another student to do so. Typically, such acts occur in relation to examinations. However, it is the intent of this definition that the term ‘cheating’ not be limited to examination situations only, but that it include any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means. Plagiarism is a specific form of cheating which consists of the misuse of the published and/or unpublished works of others by misrepresenting the material (i.e., their intellectual property) so used as one’s own work. Penalties for cheating and plagiarism range from a 0 or F on a particular assignment, through an F for the course, to expulsion from the University. For more information on the University’s policy regarding cheating and plagiarism, refer to the General Catalogue or the Graduate Bulletin section 41304.

5. **Class Attendance**: One of the professional responsibilities of a physical therapist student is to **attend every scheduled class**. Learning experiences in the curriculum are arranged sequentially, to ensure that new information, knowledge, and skills are integrated with previously introduced material. In addition, the DPT curriculum includes significant opportunities for collaborative learning, where interaction between and among students and faculty are critical components of the students’ learning. Therefore, these learning experiences cannot be repeated and your attendance is a professional responsibility. In the event the student is absent due to illness or an emergent circumstance, the instructor must be notified before class begins. The student is responsible for material covered while absent. **Corrective action for unexcused absences**: Attending class is expected during the entire DPT curriculum. Missing class adversely affects the learning experience and contributes to poor performance. **Two unexcused absences in lab or lecture a course will result in a grade of failure for that course**. Please see your student handbook for complete details on policies for attendance and absences.

6. **Classroom Tardiness**: Being on time to classes is expected. Missing class adversely affects the learning experience and contributes to poor performance. Tardiness also disrupts the class, your peers and instructor. Like unexcused absences, tardiness is considered irresponsible, disrespectful and unprofessional. **Corrective action for tardiness**: Students in violation of the tardiness requirement will first receive a verbal warning with corrective instruction for the first unexcused tardiness. If the same student breaks the tardiness policy a second time, the violation will result in the student not being allowed in the class and will receive an unexcused absence for that day. This may result in a reduced letter grade at the discretion of the instructor. A third unexcused tardiness violation will be considered a second unexcused absence and will result in a grade of failure for that course. Please see your student handbook for complete details on policies for classroom tardiness.

7. **Attire**: Students are required to wear attire which conforms to the image of the professional physical therapist. The DPT Program, is a setting where students, faculty, guests, patients, other professionals, and the general public form an impression of us, based on our appearance and conduct. Casual and “faddish” clothing are not permitted in the classroom, library, or laboratories. **Corrective Action for attire**: Students in violation of the dress requirements will first receive a verbal warning...
with corrective instruction. If the same student breaks the dress code a second time, the violation will result in
the student being sent home to change clothes and will receive an unexcused absence for that class. Please see
your student handbook for complete details on policies for attire in lectures and laboratories.

8. Missed Exams/Assignments: No makeup exams or assignments will be issued unless there is prior approval by
the instructor (please see above). The student will earn a grade of zero for a missed exam or late assignment.

9. Grade Disputes: If you would like to dispute a question or grade on an assignment or exam, you must do so in
writing within 48 hours of when the assignment or exam is returned. In your written dispute, you must include
your rationale for the dispute and any related references.

10. Social Media: Students are expected to refrain from phone calls, text-messaging and online social networking
during class and laboratory sessions.

11. Posting of Course Materials on Blackboard: The instructor will make every effort to post course materials on
Blackboard before the scheduled lecture. However, this is not always possible and students should be prepared
to take written notes in class. Any course materials that are not posted prior to lecture will be posted
immediately after lecture.

12. Religious Holidays: A student who is unable to participate in any class, examination, or assignment due to his or
her religious holy day requirements shall not be penalized, provided the instructor has been notified in writing
within 3 weeks from the beginning of the course.

13. STUDENTS WITH DISABILITIES: If you are a student with a disability and believe you will need accommodations
for this class, it is your responsibility to contact Student Disability Services at (619) 594-6473. To avoid any
delay in the receipt of your accommodations, you should contact Student Disability Services as soon as possible.
Please note that accommodations are not retroactive, and that accommodations based upon disability cannot
be provided until you have presented your instructor with an accommodation letter from Student Disability
Services. Your cooperation is appreciated. If you have a documented disability, please provide me with this
documentation by the second class meeting so that reasonable accommodations can be made.

*This syllabus and schedule are subject to change in the event of extenuating circumstances.*

FORMS

_____________________________________________________________________________________

Motor Learning PowerPoint Video Motor Skill Selection Form
Due September 4th by midnight upload in Blackboard

Partners Names:
1) __________________________________________
2) __________________________________________
3) __________________________________________
4) __________________________________________

Motor Skill Choices
First choice: __________________________________________
Second choice: __________________________________________
Third choice: __________________________________________
Fourth choice: _________________________________
___________________________________________________________________________________

**Motor Learning PowerPoint Video Group Meeting Form**

You will meet a minimum of 4 times with your group (see syllabus) and will develop and complete a group meeting form each time you meet to describe the agenda, member roles, assignments given to members, did they follow through at next meeting with assignments and accountability for the project. All 4 meeting forms will be turned in with the final PowerPoint video project and will be used when grading the assignment using the grading rubric.

(Due with Motor Learning PowerPoint Video October 26th by midnight on Blackboard)

Date of Meeting: __________________________

Group members present: ___________________________________________________________

**Group roles** - Student teams often function most effectively when members have designated roles. These can be established by the groups themselves, e.g., by giving teams a list such as the one below and asking the group to decide on and delegate appropriate roles within their group. These roles can be fixed or rotating. Here are some of the possible roles, but the list is not exhaustive. Think creatively and come up with your own ideas.

- **Facilitator** (Responsible for getting the group started, keeping it on task, and involving all members, dividing up the tasks).
- **Recorder**. (Responsible for keeping a record of what happens in the group meeting, maintains all records).
- **Time keeper/Reality checker**. (Responsible for keeping group on task and on time and responsible for noting group decisions and whether they are realistic.
- **Prioritizer**: Makes sure group focuses on most important issues and does not get caught up in details.
- **Explorer**: Seeks to uncover new potential in situations and people (fellow team members) and explore new areas of inquiry.

**Meeting Accomplishments (example):** Please summarize in detail what occurred at the each of the 4 meetings. What was each member was asked to do, did they complete task, goals for next meeting.
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Entry-level PT (5) (professional quality)</th>
<th>(4)</th>
<th>Adequate (3)</th>
<th>(2)</th>
<th>Needs Improvement (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responds fully to the assignment</td>
<td>Provides all components of the PowerPoint video with appropriate depth and clarity to fully answer each component</td>
<td>Does not provide 1-2 components of the PowerPoint video or answers all components but lacks depth and clarity in one component of the PowerPoint video</td>
<td></td>
<td>Does not answer &gt;2 components of the PowerPoint video or lacks depth and clarity in two or more components of the PowerPoint video</td>
<td></td>
</tr>
<tr>
<td>Provides detailed information on motor skill acquisition in the framework of a theory of motor learning with description of practice level, type of feedback provided, practice condition used for skill acquisition, modifications used and links to recovery of function</td>
<td>Makes appropriate connection between acquisition of motor skill and motor learning theory. Includes detail related to practical level used, feedback provided, practice condition skill was learned and describes any modifications used for learning. Links how recovery of function would be impacted; work has depth, clarity</td>
<td>Makes a connection between acquisition of motor skill and motor learning theory with some detail related to practical level, feedback, practice condition, skill acquisition and any modifications. Links to recovery of function. Works has with little support or resources; more resources would add depth to motor learning video</td>
<td></td>
<td>No support for connection between acquisition of motor skill and motor learning theory with related to practical level, feedback, practice condition and skill acquisition, modifications and recovery of function; No depth or clarity to response</td>
<td></td>
</tr>
<tr>
<td>Is focused/well-organized; is free of errors in grammar, punctuation, word choice, and format. Innovative handout design and presentation</td>
<td>Easy to follow, uses headings to direct reader; 1 or less spelling or grammar error; Material easy to view Innovative PowerPoint design and transitions</td>
<td>2-3 grammar or spelling errors; wanders with thoughts, no headings. Basic PowerPoint design, may have some difficulty in viewing due to font, transitions are basic</td>
<td></td>
<td>&gt;3 grammar or spelling errors; no focus or direction with thoughts. No PowerPoint design, transitions are distracting</td>
<td></td>
</tr>
<tr>
<td>Correctly documents references and meetings held as group. Assignment</td>
<td>Uses AMA format correctly; uses outside source(s) in addition to text book. Provides all meeting</td>
<td>References listed but not AMA format; uses outside source(s) in addition to text book.</td>
<td></td>
<td>No references listed and/or no outside sources. Does not provide meeting forms as assigned.</td>
<td></td>
</tr>
<tr>
<td>is turned in on time forms. Assignment is turned in on time</td>
<td>Provides most meeting forms. Does not meet assigned timelines.</td>
<td></td>
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</tr>
<tr>
<td><strong>Group demonstrates equal contribution to the group of other learners’; fully participates in learning community with role, attendance at all meetings, follow through with assignments in timely manner</strong></td>
<td><strong>Attends all meetings, has role and follows through with assignments determined at each meeting, documentation demonstrates contribution</strong></td>
<td><strong>Holds 3 out of the 4 meetings, roles and actions of group are not well delineated or limited information on role of members and what was assigned or completed for next meeting. Not completed in a timely manner</strong></td>
<td><strong>Does not hold or attend all meetings, roles and actions of group are not delineated or unable to determine if members followed through with assigned roles or activities.</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**DPT 835 Lab Practical Rubric**

Name __________________________   Overall Score_____/45

1) **Activity Based Task Analysis**
   a. **Functional Task Presented:**

   b. **Functional Activity Analysis (6 points):** *What are the initial conditions required? Starting position and initial alignment? How and where is the movement initiated? How is the movement performed? How is the movement terminated?*

   Points ______/6

2) **Identifying impairments (8 points):**
   a. Centered on your activity based task analysis, identify 4 impairments that are linked to deficits in functional performance of the activity. Additionally, provide a rationale of why you think it is an impairment (1 point each impairment, 1 point each rationale)
Points _______/8

3) Examination techniques (17 points, see following pages):
   a. Randomly selected test:

   b. General Abilities (6 points):
      i. Introduction as a student PT/ obtains patient consent (1 point)
      ii. Provides description of test (brief, informative, uses appropriate lay language, demonstrates if appropriate) (2 points)
      iii. Appropriate interaction with patient throughout exam (communication, ensures patient comfort, attention to patient’s response) (1 point)
      iv. Selects appropriate patient position to ensure comfort and optimal alignment of pt. and/or body segment (1 point)
      v. Use of ideal body mechanics including raising and lowering of treatment table (1 point)

   Points _______/6

   c. Compromising patient safety results in automatic failure of practical exam. This includes not using gait belt when indicated, leaving patient unattended, unsupported, or not guarded during testing, or performing test in unsafe or harmful manner.

   Pass/Fail (Circle One)

   d. Interpretation of Examination findings (8 points): Able to discuss the results of the findings using appropriate physical therapy terminology, interprets the results accurately, and provides an appropriate rationale.

   Points ______

   e. Specific examination technique- You will be required to perform ONE of the following test and measures on the “patient”:

      i. Strength and Active Movement Control (Synergistic/ Isolated Movements) (17 points) Assesses the uninvolved extremity first (2 points) ______
         1. Assesses motor control of the appropriate muscle group first in an against gravity position (4 points) ______
         2. Assesses motor control of the appropriate muscle group in a gravity eliminated position (4 points) ______
         3. Manually supports the test limb to assess for active components of the synergy that are moving in a gravity eliminated position (4 points) ______
         4. Applies resistance to movements which are isolated (3 points) ______
ii. UE or LE Non-equilibrium Coordination Testing (17 points)
   1. Begins assessment with uninvolved extremity first as a comparison and
demonstration (3 points) _________
   2. Instructs patient to perform with eyes open and closed, varies speed, and/or
performs unilateral vs. bilateral (as appropriate to test chosen) (4 points)
   _________
   3. Selects three tests that will evaluate alternate or reciprocal motion, movement
composition, movement accuracy, and/or fixation for either the upper or lower
extremities (6 points) ______
   4. Student has the patient perform sufficient repetitions to allow for accurate
assessment (4 points)________

iii. Sitting Balance (no tech allowed) (17 points)
   1. Unchallenged static sitting balance is tested (student times duration of
unsupported sitting before LOB, if no LOB student assesses for at least
30sec) (3 points) _________
   2. Challenged static sitting balance tested with EC (student times duration of
EC unsupported sitting before LOB, if no LOB student assesses for at least
30sec) (3 points) _______
   3. Challenged static sitting balance tested with perturbations (reactive postural
control is assessed with UNEXPECTED perturbations in multiple
directions/begins with small quick nudges and progress to maximal as
appropriate) (3 points) _________
   4. Unchallenged dynamic sitting balance is tested with min (2-4in), mod (4-8in),
and maximal trunk excursions (>8in) in multiple directions. Student checks
arms length first and ensures intentional trunk movement (3 points)
   _________
   5. Challenged (student’s choice) dynamic sitting balance is tested with min,
mod, and maximal excursions as above in multiple directions (3
points)________
   6. Student allows enough time for patient to react to perturbations before
applying the next one. Student provides appropriate guarding without
assisting the patient to accurately assess balance (2 points) _________
iv. Standing Balance (no tech allowed) (17 points)
   1. Unchallenged static standing balance is tested (student times duration of unsupported standing before LOB, if no LOB student assesses for at least 30sec) (3 points)_________
   2. Challenged static standing balance tested with EC (student times duration of EC standing time before LOB, if no LOB student assesses for at least 30sec) (3 points) __________
   3. Challenged static standing balance tested with perturbations (reactive postural control is assessed with UNEXPECTED perturbations in multiple directions/begins with small quick nudges and progress to maximal as appropriate) (3 points) __________
   4. Unchallenged dynamic standing balance is tested with min (2-4in), mod (4-8in), and maximal trunk excursions (>8in) in multiple directions. Student checks arm’s length first and ensures intentional trunk movement (3 points) __________
   5. Challenged (student’s choice) dynamic standing balance is tested with min, mod, and maximal excursions as above in multiple directions (3 points) __________
   6. Student allows enough time for patient to react to perturbations before applying the next one. Student provides appropriate guarding without assisting the patient to accurately assess balance, uses a gait belt without cueing (2 points) __________

Note: If a portion of the balance tests are deemed not appropriate (i.e. too difficult for the patient to safely perform), the student must provide an adequate rationale.

v. Kinesthesia & Position Sense (17 points)
   1. Performs test as demonstration with eyes open first and performs on a portion of the non-affected extremity first as a demonstration (if one exists) (3 points) __________
   2. Instructs patient not to guess and to close eyes during the test. (2 points) __________
   3. Holds the extremity at bony landmarks (3 points) __________
   4. For kinesthesia: moves the limb slowly in random directions beginning with small amplitude movements and progressing to large as needed, at least 4 times (3 points) __________
   5. For proprioception, move the limb in random positions 4 times, more if needed (3 points) __________
   6. Patient is instructed to respond when appropriate (during the movement for kinesthesia and after the movement for position sense) and utilizes the mirror method (3 points) __________
vi. Passive Movement Assessment Tone/Spasticity (17 points)
1. Assesses tone of the uninvolved extremity first for comparison (3 points)

2. Moves the limb slowly for tone assessment (3 points) _________
3. Moves the limb rapidly (one direction at a time) for spasticity assessment and informs the patient when they will be starting the fast passive movement (3 points) _________
4. Instructs and ensures that patient relaxes to allow for passive movement.
5. Provides repeated cues as necessary (4 points)_________
6. Moves the joint through all planes of motion and through an appropriate ROM (4 points) _________

vii. Cranial Nerve II (17 points)
1. Visual fields of both eyes are assessed individually, with the opposite eye covered (4 points) ________
2. Patient is instructed to focus on therapist’s nose or midline object and state when they see the object in their visual field (4 points) _________
3. All four visual quadrants for each eye are tested separately (4 points) _______
4. Therapist begins assessment outside of the normal field of vision for each quadrant (2 points) ________
5. Therapist moves finger or object slowly and at an even pace (3 points) ________

viii. Cranial Nerves III, IV, VI (17 points)
1. Movements of both eyes are tested simultaneously in all directions (with an appropriate sized H pattern) using an object or finger for the patient to follow and cues patient as needed to not move their head (4 points) ________
2. Therapist moves finger or object at a slow and even pace (3 points) ________
3. Pupillary accommodation reflex is tested by looking at a near and far object that are in line with each other (3 points) _______
4. Pupillary light reflex is tested by use of penlight into each eye separately, begins from the side of the eye and moves to front (4 points) ________
5. Therapist watches for both the direct response and the consensual response in each eye (3 points) ________

ix. Sensation testing—light touch & sharp/dull (17 points)
1. Confirms sensation on an intact portion of the patient (i.e. demonstrates difference between sharp and dull object and light touch on face or uninvolved extremity for a comparison and demonstration to normal) (3 points) ________
2. Instructs patient not to guess and to close eyes during the test (2 points) ________
3. Light touch is applied with cotton ball and areas tested are lightly touched (1cm) and compared to normal sensation as needed (4 points) ________
4. Sharp/dull is performed with appropriate tool and applied with uniform pressure repetitively (4-5x) over one spot before moving to the next. If
necessary, sharp sensitivity is compared to intact area of the body for comparison to normal (4 points)

5. Sharp/dull and light touch is applied in a “random” yet organized fashion and all parts of the limb are tested (proximal, distal, dorsal and ventral) (4 points)
Group Members: ________________________________

Date: ______________________

Patient Name: ___________________________ Age: _______ Gender_____ 

Medical Dx: _____________________________ Referral Source: _____________

History (2.5 pts):

History of Current Condition:

Past Medical History:

Medical Test Results:

Medications:

Prior /Current Level of Function:

Social History:

Living Environment:

Fall History:

Patient’s Goals:

Systems Review (2.5 -1/2 pts each):

Cardiopulmonary: HR_______ BP_______ RR_______

Integumentary:
Musculoskeletal:

Neuromuscular:

Cognition/ Communication:

Tests and Measures (12 pts total):

Task analysis (2 pts): Describe the temporal sequence for at least 1 strategy from the list below (1-5) using the temporal sequence – initial condition, preparation, initiation, execution and termination.

Bed Mobility:
1. Rolling (right/ left)
2. Supine-sit
3. Sit –supine

Transfers:
4. WC-Bed
5. Sit to Stand:

Balance (1 pt):
Sitting:
Static:
Dynamic:
Standing:
Static:
Dynamic:
Standardized Outcome Measure (if applicable):

Gait (1 pt):  Device:
Assist level:
Surface:
Distance:
Velocity:

Gait deviations/compensations (describe through the gait cycle using Rancho’s terms):

PROM (1pt):

Tone (1pt):

Strength and Active Movement/ Motor Control (1pt):

Sensation (1pt-1/4 pt for each sensation):
Light Touch:
Sharp/Dull:

Proprioception (position sense and movement sense)

Cortical Sensory Tests:

Coordination (1pt):
Cranial Nerve Integrity (1/2 pt):

Reflexes (1/2 pt):

Other Outcome Measure (2 pt):

EVALUATION (10 pts total):
Problem List (2pt):

Assessment Summary (2 pts):

Prognosis (1 points):

PT Diagnosis (1 pt):

Physical Therapy Practice Pattern (1/2 pt):

Long Term Functional Goals (note: each goal is worth 1pt):

1.  
2. NT I – DPT 835
2. 

3. 

Intervention Plan (Use the Guide to PT Practice) (1/2 pt):

Student Physical Therapist: _______________________ Signature Date: ______
Student Physical Therapist: _______________________ Signature Date: ______
Student Physical Therapist: _______________________ Signature Date: ______
Student Physical Therapist: _______________________ Signature Date: ______
Student Physical Therapist: _______________________ Signature Date: ______
Supervising Physical Therapist: ____________________ Signature Date: ______

Reflection Paragraph (3 points): 
The reflection paragraph is your chance to add your thoughts and analysis to what you have read and experienced during the patient client evaluation. It is meant to illustrate your understanding of the material and how it affects your ideas and possible practice in future.