

**The University of Texas at El Paso  
College of Health Sciences  
Doctor of Physical Therapy Program**

**PT 6414**

**Neuromuscular Rehabilitation II**

**Spring 2020**

**COURSE SYLLABUS**

**Credit Hours:**

**Contact Hours:**     **Total: 120 hrs**  
Lecture: 30 hrs; Lab: 90 hrs; Clinic: 0 hrs

**Schedule:**

Monday	3:00 pm - 5:00 pm
Tuesday	1:30 pm - 4:30 pm
Thursday	8:00 am – 11:00 am

**Coordinator/Instructor(s):**

Faculty:                    *Michelle Gutierrez, PT, Dsc*  
Office location:         *Campbell Room 308*  
Phone #:                    *915-747-8148*  
Cell Phone for  
emergency:                 *575-650-9121*  
E-mail:                     *mgutierrez28@utep.edu*  
Office hours:              *Thursdays from 12:30-2:30 in office 308;*  
                                  *Available for phone meetings if needed on Wednesdays*  
                                  *from 11:30-12:30.*  
                                  *Schedule meetings at:*  
                                  <https://calendly.com/drgutierrez/20min>  
                                  *If the times don't work for your schedule email some*  
                                  *suggestions of meeting times.*

Teaching Assistant: *Andrea Goche, [goche2004@hotmail.com](mailto:goche2004@hotmail.com)*

**Course Description:** Building on knowledge acquired in Neuromuscular Rehabilitation I, this course develops clinical approaches to the long-term management of pathology and trauma in neurologic patients. Using differential diagnosis, students develop the ability to identify neurologic disorders in real and simulated patients, with the goal of implementing an effective plan of care. Emphasis will be on clinical application.

**Course Prerequisites for DPT Students:** The UTEP DPT Program curriculum is a lock-step curriculum. Therefore, students must pass all courses in the prior semester of the DPT Program in order to enroll in courses in the subsequent semester. Faculty may consider exceptions for PT 6116 PT Capstone Project I and PT 6117 PT Capstone Project II.

**Course Objectives:**

Upon completion of this course, the student should be able to:

1. Demonstrate effective clinical reasoning for the management of patients/clients\* with common neurologic conditions by applying key course concepts (including CVA and TBI/ hemiparesis). (7D11) [Application]
2. Determine when patients/clients with common neurologic conditions need further examination or consultation by a physical therapist or a referral to another health care professional. (7D16) [Analysis]
3. Obtain a history and relevant information from patients/clients with a common neurologic condition and from other sources including medical records. (7D17) [Synthesis]
4. Perform a systems review with patients/clients with common neurologic conditions. (7D18) [Application]
5. Select and competently administer appropriate tests and measures with simulated patients/clients with common neurologic conditions, including the following tests and measures: [Application]
  - Aerobic Capacity/Endurance (7D19a)
  - Assistive Technology (7D19c)
  - Balance (7D19d)
  - Circulation (Arterial, Venous, Lymphatic (7D19e)
  - Self-Care and Civic, Community, Domestic, Education, Social and Work Life (7D19f)
  - Cranial and Peripheral Nerve Integrity (7D19g)
  - Environmental Factors (7D19h)
  - Gait (7D19i)
  - Integumentary Integrity (7D19j)
  - Joint Integrity and Mobility (7D19k)
  - Mental Functions (7D19l)
  - Mobility (including locomotion) (7D19m)
  - Motor function (7D19n)
  - Muscle Performance (7D19o)
  - Neuromotor Development and Sensory Processing (7D19p)
  - Pain (7D19q)
  - Posture (7D19r)
  - Range of motion (7D19s)
  - Reflex Integrity (7D19t)
  - Sensory Integrity (7D19u)
6. Evaluate data from the examination of clients/patients with common neurologic conditions to make clinical judgements (7D20) [Evaluation]
7. Determine goals and expected outcomes for patients/clients with common neurologic conditions that are realistic given the available resources and specify expected length of time to achieve them. (7D23) [Analysis]
8. Establish a safe and effective plan of care for patients/clients with common neurologic conditions in collaboration with the patients, family, and other health professionals. (7D24) [Application]

9. Determine those components of the plan of care for patients/clients with common neurologic conditions that may, or may not, be directed to the physical therapist assistant based on patient/client needs, PTA training and education, and Texas PT Practice Act & Rules. (7D25) [Analysis]
10. Select and competently perform appropriate interventions to achieve the goals for patients/clients with common neurologic conditions, including the following interventions: [Application]
  - Assistive technology (7D27b)
  - Functional training (7D27d)
  - Integumentary protection (7D27e)
  - Motor function training (including balance and gait) (7D27g)
  - Patient/client education (7D27h)
  - Therapeutic exercise (7D27i)
11. Monitor and adjust the plan of care in response to the status of patients/clients with common neurologic conditions. (7D30) [Application]
12. Assess outcomes for patients/clients with common neurologic conditions, including the use of appropriate standardized tests and measures that address impairments, functional status, and participation. (7D31) [Evaluation]
13. Respond effectively to urgent and emergent situations for patients/clients with common neurologic conditions, including performing CPR. (7D33) [Application]
14. Document physical therapy patient/client encounter in a manner that communicates clear, concise, and complete information. Further, the document should accurately convey medical necessity, be evidence-based and defensible, and complies with local, state, and federal regulations. (7D32) [Application]
15. Demonstrate professional behavior that is consistent with the APTA Code of Ethics and Core Values during class and lab. (7D4, 7D5) [Application]
16. Communicate effectively and professionally with patients/clients with common neurologic conditions, their families, and other health professionals. (7D7) [Comprehension]

\*NOTE: "Patients/clients" in course objectives refer to simulated patients/clients in the simulation laboratory and/or to patients/clients in written cases and/or people with neurologic conditions.

**Methods of Instruction:** Teaching methods and learning activities will include lecture, lab, video presentations, small group discussion and problem-solving exercises, role playing, independent reading, homework assignments and independent case studies. Students are expected to take full advantage of office hours and any supplemental study sessions as an opportunity for individual feedback regarding understanding of course material from instructors and peers.

**Methods of Evaluation:** Student competence and attainment of course objectives are assessed using a variety of methods. These methods and their contribution to the final grade are listed in the table below.

<b>Item</b>	<b>Grade Composition</b>
Quizzes (written)	5%
Assignments	10%
Exam 1	15%
Exam 2	15%
Exam 3 (written)	15%
Practical exam (psychomotor)	20%
Final Exam (written)	20%
Total	100%

**Grading Scale:** The following letter grade scale is used for the UTEP Doctor of Physical Therapy Program:

<u>Letter Grade Scale</u>	<u>Numerical Grade Scale</u>
A	90-100
B	80-89
C	75-79
F	Below 75

**Required Textbooks and Other Learning Resources:**

- Fell DW, Lunnen KY, Rauk RP. Lifespan Neurorehabilitation: A Patient-Centered Approach from Examination to Interventions and Outcomes. Philadelphia, PA: FA Davis; 2018. (ISBN-13: 978-0803646094) <https://0-fadavispt-mhmedical-com.lib.utep.edu/book.aspx?bookid=2327>
- Nichols-Larsen DS, Kegelmeyer DA, Buford JA, Kloos AD, Heathcock D, Basso DM. Neurologic Rehabilitation: Neuroscience and Neuroplasticity in Physical Therapy Practice. New York, NY: McGraw-Hill; 2016. <http://0-accessphysiotherapy.mhmedical.com.lib.utep.edu/content.aspx?bookid=1760&sectionid=120047216>
- O'Sullivan SB, Schmitz TJ. Physical Rehabilitation. 6th ed. Philadelphia, PA: FA Davis Co; 2014. (ISBN 978-0-8036-2579-2)
- O'Sullivan SB, Schmitz TJ. Improving Functional Outcomes in Physical Rehabilitation. 2nd Edition. Philadelphia, PA: FA Davis Co; 2016. (ISBN: 978-0-8036-4612-4)
- Shumway-Cook A, Woollacott, MH. Motor Control: Theory and Practical Applications. 4th ed. Philadelphia, PA: Lippincott, Williams & Wilkins; 2012.
- Exercise Considerations for persons with neurological disability part 1
  - [https://www.youtube.com/watch?v=BWhB\\_bsRWqk](https://www.youtube.com/watch?v=BWhB_bsRWqk)
- Exercise Considerations for persons with neurological disability part 2 CVA
  - <https://www.youtube.com/watch?v=0oCdZqtUTW4>
- Exercise Considerations for persons with neurological disability part 3 MS
  - <https://www.youtube.com/watch?v=AbLLp3jGR9k>
- Exercise Considerations for persons with neurological disability part 4 SCI
  - <https://www.youtube.com/watch?v=uHMRsF1LTbl>
- Exercise Considerations for persons with neurological disability part 5 Post-Polio
  - <https://www.youtube.com/watch?v=StolCfyCcus>

**Recommended Textbooks and Other Learning Resources:**

- Blumenfeld H, Neuroanatomy through Clinical Cases. 2nd ed. Sunderland, Mass: Sinauer Associates, Inc. Publishers; 2010.
- Fenderson CB, Ling WK. Neuro Notes Clinical Pocket Guide. Philadelphia, PA. FA Davis, 2009. (ISBN 10: 0-8036-1747-X, ISBN 13: 978-0-8036-1747-6)
- Martin S, Kessler M. Neurologic Interventions for Physical Therapy. 2nd ed. St. Louis, MO: Saunders Elsevier; 2007. (ISBN 978-0-7216-0427-5)
- Herdman, SJ. Vestibular Rehabilitation. 4th ed. Philadelphia, PA: FA Davis Co; 2014 (ISBN 978-0-8036-3970-6)
- Observational Gait Analysis. Downey, CA: Los Amigos Research and Education Institute, Rancho Los Amigos National Rehabilitation Center; 2001. (ISBN 0-9676335-1-6)
- Perry J, Burnfield JM. Gait Analysis Normal and Pathological Function, 2nd Ed. Thorofare, New Jersey: SLACK Inc; 2010. (ISBN 978-1556427664)
- Somers MF. Spinal Cord Injury: Functional Rehabilitation. 3rd ed. Upper Saddle River, NJ: Prentice Hall; 2010. (ISBN 13: 978-0-13-159866-9)
- Umphred D. Neurological Rehabilitation, 6th ed. St. Louis, MO: Mosby; 2013. (ISBN 978-0-323-07586-2)

**Resources Available for Student Success:****Confidential Resources:**

- **Center for Accommodations and Support Services (CASS):** If you have or suspect a disability and need accommodations, you should contact the Center for Accommodations and Support Services (CASS) at 747-5148. You can also e-mail the office at [cass@utep.edu](mailto:cass@utep.edu) or go by their office in Union Building East, room 106 (next to the UTEP post-office). For additional information, visit the CASS website at <http://sa.utep.edu/cass>.
- **The UTEP Student Health Center:** Union East Suite 100; 915.747.5624; [www.utep.edu/chs/shc](http://www.utep.edu/chs/shc)
- **The UTEP Counseling and Psychological Services:** 202 Union West, 915.747.5302; [www.utep.edu/student-affairs/counsel](http://www.utep.edu/student-affairs/counsel)

**Additional Resources:**

- Division of Student Affairs. 915.747.5076, [www.utep.edu/student-affairs](http://www.utep.edu/student-affairs)
- DPT Library Research Guide: <http://libguides.utep.edu/pt>
- Writing Center: 915.747.5112. <https://uwc.utep.edu>
- Computer Labs: Independent Learning Center (ILC), 1<sup>st</sup> floor Campbell Building
- Military Student Success Center: 915.747.5342, [www.utep.edu/student-affairs/mssc](http://www.utep.edu/student-affairs/mssc)
- Student Wellness Program. 915.747.6738, [www.utep.edu/chs/wellness](http://www.utep.edu/chs/wellness)

**University Policies:** All students are responsible for following UTEP policies and procedures found in the Handbook of Operating Procedures at [www.utep.edu/vpba/hoop](http://www.utep.edu/vpba/hoop)

**Program Policies:** All DPT students are responsible for following all policies and procedures documented in the current DPT Student Handbook. Course policies found in the DPT Student Handbook apply to all courses in the DPT curriculum. The current DPT Student Handbook may be found on the DPT Student Resources site on Blackboard.

**Academic Integrity:** The UTEP DPT Program has a “zero tolerance policy” for scholastic dishonesty. DPT students must demonstrate academic integrity at all times. The current DPT Student Handbook outlines specific definitions, expectations, details, and consequences related to academic integrity and scholastic dishonesty. Additional information related to academic integrity is available through the UTEP Division of Student Affairs at [www.utep.edu/student-affairs/osccr/student-conduct/academic-integrity.html](http://www.utep.edu/student-affairs/osccr/student-conduct/academic-integrity.html)

**Course-Specific Policies:**

1. **Attendance Policy - Absences:** Refer to current DPT Student Handbook “Attendance and Classroom Behavior” for the DPT Program policy. Additional course-specific policy are as follows:
  - Attendance at all classes/labs is expected. **All faculty have different policies.** Treat this class as you would a job. I am expected to be at class/labs as scheduled and to be on time; I expect the same from you. You are expected to be in class during the time listed. In this class, students are expected to be on time and prepared to begin the course. If you expect to miss a class you should notify the instructor in writing by email at a minimum of 24 hours in advance.
  - If an emergency or illness prevents a student from attending class (e.g., documented serious illness or emergency), communication directly with the instructor is expected **2 hours prior to the beginning of class** in writing by email. A verbal message through another student will not suffice. For any missed class, it is the responsibility of the student to obtain any materials presented in class and to ensure assignments are turned in on time. **HOWEVER**, (with very rare exception, which will be considered on a case by case basis) there will be **NO** accommodations offered for missed class time. Specifically, there is **NO** opportunity to make up in-class quizzes or exams, either in advance of or after the scheduled class, or provide individual tutoring for missed content. Additionally, late work caused by your absence will not be accepted. You should make prior arrangements with a classmate to find out what you missed, turn in any work, and/or pick up any hand-outs.
  - Missing 30 minutes or more of a class or lab will be considered an absence – during any part of the class/lab.
  - Each unexcused absence will result in a 5% deduction from your final course grade.
2. **Attendance Policy - Tardiness & Early Departures:** Refer to current DPT Student Handbook “Attendance and Classroom Behavior” for DPT Program policy. Additional course-specific policy is as follows:

- Attendance at all classes/labs is expected. **All faculty have different policies.** In this class students are expected to be on time and prepared to begin the course; therefore, students who are tardy will be penalized. I use the clock on the computer to determine when class should start. If you expect to arrive late (e.g., doctor's appointment), you should notify me in writing by email at a minimum of 24 hours in advance.
  - Please do not get up and leave during lectures without permission. This is considered disruptive behavior.
  - Similarly, if you need to leave class or lab early, I should be notified in writing at least 2 hours prior to the start of class.
  - Each incidence of tardiness may result in 1% deduction from your final semester grade.
  - Missing 30 minutes or more of a class or lab will be considered an absence.
  - Each unexcused absence will result in a 5% deduction from your final course grade.
3. **Electronic Devices:** Refer to current DPT Student Handbook "Electronic Devices" for DPT Program policy. Additional course-specific policy is as follows:
- Lap tops are allowed for taking notes, accessing lecture/ lab material or books. Email and social media should be turned off during all class time.
  - Cell phones and telecommunication devices should be in silent mode, turned off, or left outside of the classroom during lecture or presentations and labs. If any circumstance necessitates the student to have his/her cell phone turned on in the classroom, it **MUST** be discussed with the instructor **PRIOR** to class.
  - Any student who is observed to be using these devices during class time without permission will be deemed to be demonstrating unprofessional behavior will be warned one time and if the behavior continues the student will be instructed to leave the classroom for the day and the class session will be considered an unexcused absence. This includes but not limited to using a laptop computer or smart phone/watch for accessing email, messaging, or the internet for purposes not related to class topics during class time.
  - If a student is consistently caught using electronic devices, the student will be contacted to meet with the instructor to discuss the problem.
  - Each subsequent incidence of using electronic devices may result in 1% deduction from the final semester grade.
  - **The taking of pictures or video during classes or labs must be approved.**
4. **Professional Behavior Policy:** See DPT Student Handbook "Attendance and Classroom Behavior", "Professional Behaviors" and "Unprofessional Behavior:" for general program policy. Additional course-specific is as follows:
- *Professional behavior will be expected in ALL class sessions and inside and outside of the classroom.*

- *I expect each student to arrive to class and lab prepared and to actively participate while not being disruptive.*
  - *Students demonstrating unprofessional behavior will be warned one time and if the behavior continues the student will be instructed to leave the classroom for the day and the class session will be considered an unexcused absence.*
  - *If a student is consistently ill-prepared, not actively participating, and/or being disruptive (including leaving class during lectures), the student will be contacted to meet with the instructor to discuss the problem.*
  - *Each subsequent incidence of poor preparation, poor participation, and/or disruption may result in 1% deduction from the final semester grade.*
  - *All students are expected to wear appropriate attire for all lab sessions. Appropriate attire is discussed in the Policies and Procedures manual. Professional dress is appropriate for presentations and for all guest speakers and when representing UTEP outside of the class room (i.e. clinic visits). Shorts and tank tops or t-shirts are required for all lab sessions (JEANS OR OPEN TOED SHOES ARE NOT APPROPRIATE FOR ANY LAB SESSION). Students who are not appropriately attired will be instructed to leave the classroom for the day and the class session will be considered an unexcused absence.*
  - *Each unexcused absence will result in a 5% reduction of your total class grade.*
5. **Late or Missed Assignments and Assessments Policy:** See current DPT Student Handbook “Written Examination Policy”. Additional course-specific policy is as follows:
- Homework assignments are due online BEFORE the due date, unless otherwise specified. Students must assure that their papers have successfully uploaded as an attachment. Students who have difficulty with submitting their work online must contact the instructor or help desk immediately. Only after this process has been completed will an assignment be considered to be accepted via email.
  - There will be a 10% reduction per day for all late assignments. Any assignment more than 3 days late will receive no credit.
6. **Skills Check Policy:**
- not applicable
7. **Practical Exam Policy:**
- In clinically-oriented, kinesthetically-based courses, each student is required to demonstrate competence by means of laboratory practical examinations. The student must successfully complete each practical examination with a passing score (“C” or better). Should a lower grade be attained, the student may be provided ONE additional testing opportunity to demonstrate competence in that material. The student must demonstrate a passing score on the retake. The student will earn no better than a 75% if he/she passed the 2nd exam. Students failing to achieve this standard for each competency test in a given course will not pass the course.



- Refer to the DPT Student Handbook “Practical Exam Policy” for details.

**Course Content and Schedule:** (Note: Students will be notified of changes via Blackboard or email. Additional details may be available in supporting course documents provided by the course instructor).

Date	Room	Topic	Reading Assignment (Readings may be added/or changed at the discretion of the instructor)
<a href="#">Week 1</a> Jan 22 (Mon)	<b>MARTIN LUTHER KING JR HOLIDAY</b>		
21 Jan (Tues) 1:30-5	Lec Rm 115	Neuro 2 Introductions/ Expectations Vestibular Rehabilitation: Review A&P and common conditions <b>(Gutierrez/Goche)</b>	<b>Required</b> <ul style="list-style-type: none"> <li>• Review Neuroscience Vestibular A&amp;P</li> <li>• View Intro Video prior to day one</li> <li>• Fell Chpt 8</li> <li>• Goebel JA. The ten-minute examination of the dizzy patient. Seminars in Neurology 2001;21:391-398.</li> </ul> <b>Recommended</b> <ul style="list-style-type: none"> <li>• O’Sullivan Chp 21</li> <li>• Nichols-Larson Chp 12</li> </ul>
23 Jan (Thur) 8-11	Lab Rm 115/113	Vestibular Rehabilitation: Tests Vestibular Rehabilitation: BPPV <b>(Gutierrez/Goche)</b>	
<a href="#">Week 2</a> 27 Jan (Mon) 3-5	Lab Rm 115	<b>Quiz 1</b> Vestibular Rehabilitation Treatment <b>(Gutierrez)</b>	<b>Required</b> <ul style="list-style-type: none"> <li>• See above</li> </ul> <b>Recommended</b> <ul style="list-style-type: none"> <li>• Fell Chpt 29</li> </ul>
28 Jan (Tuesday) 1:30-5	Lab Rm 115/113	Balance and Vestibular Evaluation Postural Control/Balance: Treatment <b>(Gutierrez/Goche)</b>	
29 Jan (Wed) 1-5	Lab Rm 115/113	Vestibular Rehabilitation: Differential Diagnosis <b>(Gutierrez)</b>	

<a href="#">Week 3</a> 3 Feb (Mon) 3-5	Lec Rm 115	CARE <b>(Dr. Allison Kincaid)</b>	<b>Required</b> <ul style="list-style-type: none"> <li>• See BBL for required readings</li> <li>• Exercise Videos:</li> <li>• Exercise Considerations for persons with neurological disability part 1</li> <li>• Exercise Considerations for persons with neurological disability part 2 CVA</li> </ul>
4 Feb (Tue) 2-5	Lab Rm 115/113	Balance/Postural Control Intervention <b>(Gutierrez/Goche)</b>	<b>Required</b> <ul style="list-style-type: none"> <li>• Fell Chpt 30 pg 949-973</li> <li>• Shumway Cook Chpt 11 pg 285-306</li> </ul> <b>Recommended</b> <ul style="list-style-type: none"> <li>• Shumway Cook Review pg 260-285</li> </ul>
6 Feb (Thur) 8-11	Lab Rm 115/113	Balance/Postural Control Intervention <b>(Gutierrez/Goche)</b> Spanish	
<b>9 Feb</b> <b>(Sun)</b>	<b>GROUP VESTIBULAR ASSIGNMENT DUE ON BBL BY MIDNIGHT</b>		
<a href="#">Week 4</a> 10 Feb (Mon) 3-5	Lec Rm 115	<b>Quiz 2</b> Age-Related Neurologic Changes Change in Cognitive Function/Dementia <b>(Gutierrez)</b>	<b>Required</b> <ul style="list-style-type: none"> <li>• Nichols-Larson Chp 17 (Cognitive, Dementia)</li> </ul>
11 Feb (Tue) 2-5	Lab Rm 115/113	Age-Related Neurologic Changes Cerebellar Damage <b>(Goche/Gutierrez)</b>	<b>Required</b> <ul style="list-style-type: none"> <li>• Nichols-Larson Chp 16 (Cerebellar)</li> </ul>
12 Feb – 14 Feb	<b>CSM 2019 No Neuro Classes (see Assignments)</b>		
<b>16 Feb</b> <b>(Sun)</b>	<b>INDIVIDUAL FEEDBACK/RUBRIC SCORE VESTIBULAR ASSIGNMENT DUE ON BBL BY MIDNIGHT</b>		
<a href="#">Week 5</a> 17 Feb (Mon) 3-5	Lec Rm 115	Pathologic Gait <b>(Gutierrez/Goche)</b>	<b>Required</b> <ul style="list-style-type: none"> <li>• Review Gait from Neuro 1, Kines</li> </ul>
18 Feb (Tue) 2-5	Lab Rm 115/113	Pathologic Gait treatment <b>(Gutierrez/Goche)</b>	<b>Required</b> <ul style="list-style-type: none"> <li>• Shumway Cook Chpt 16 pg 431-461</li> <li>• Fell Chpt 31 pg 1149-1168</li> </ul> <b>Recommended</b> <ul style="list-style-type: none"> <li>• O’Sullivan Lab Chpt 10</li> </ul>
20 Feb (Thur) 8-11	Lab Rm 115/113	Pathologic Gait treatment <b>(Gutierrez/Goche)</b> Spanish	

<a href="#">Week 6</a> 24 Feb (Mon) 3-5	<b>ILC</b>	<b>EXAM 1 (Vestibular, Balance, gait &amp; FIM/CARE: Covering everything through Feb 20)</b>	
25 Feb (Tue) 2-5	Lab Rm 115/113	Motor Neuron Disease and Neuropathies Amyotrophic Lateral Sclerosis, Gillian Barre, Post-Polio Syndrome, Peripheral Neuropathies <b>(Gutierrez/Goche)</b>	<b>Required</b> • Nichols-Larson Chp 15
27 Feb (Thur) 8-11	Lab Rm 115/113	Motor Neuron Disease and Neuropathies Treatment <b>(Gutierrez/Goche)</b>	
<a href="#">Week 7</a> 2 Mar (Mon) 3-5	Lec/Lab Rm 115	<b>Quiz 3</b> Case prep for practical <b>(Gutierrez)</b>	
3 Mar (Tue) 2-5	Lab Rm 115/113	Impairment Intervention Case prep for practical <b>(Gutierrez/Goche)</b>	TBD
5 Mar (Thur)  Lab B: 1:30-3:00 Lab A: 3:00-4:30	<b>The Hospitals of Providence</b>  <b>1740 Curie</b>	Neuro Aquatics <b>(Dillon/Gutierrez)</b> <b>Bring your swim suit and towel. You WILL get in the water.</b>  PARK ON THE STREET PLEASE. Enter the building through the front door and head down the hallway. Take the first left and the PT Dept will be on your left towards the end of the building. Enter the PT Dept and the pool is located on the east side of the gym. <b>Be ready so that you are IN the water at 1:30 PM or 3:00 PM depending on your time slot</b>	See BBL for required readings
<a href="#">Week 8</a> 9 Mar (Mon) 3-5	Lec Rm 115	<b>Quiz 4</b> Progressive Neurologic Disorders Multiple Sclerosis <b>(Gutierrez/Cwiklinski)</b>	<b>Required</b> • Nichols-Larson Chp 13 (Signs and Symptoms, Prognosis, PT Management)
10 Mar (Tue) 2-5	Lab Rm 115/113	Progressive Neurologic Disorders Multiple Sclerosis <b>(Gutierrez/Goche)</b>	<b>Required</b> • Watch Exercise Video: • Exercise Considerations for persons with neurological disability part 3 MS • See Above
12 Mar (Thur) 8-11	Lab Rm 115/113	Progressive Neurologic Disorders Multiple Sclerosis <b>(Gutierrez/Goche)</b> Spanish	
March 16-21		<b>SPRING BREAK</b>	

<a href="#">Week 9</a> 23 Mar (Mon) 3-5	Lec Rm 115	Basal Ganglia Disorders: Parkinson's Disease <b>(Brooks)</b>	<b>Required</b> • Nichols-Larson Chp 14 (Parkinson's) <b>Recommended</b> • O'Sullivan Chp 18
24 Mar (Tue)	<b>ON YOUR OWN TIME</b>	Basal Ganglia Disorders: Huntington's Disease	<b>Required</b> • Videos/PPT posted BBL <b>Recommended</b> • Nichols-Larson Chp 14 (Huntington's)
<b>26 Mar</b> (Thur) <b>1:30-4:30</b>	<b>Move</b> <b>Physical</b> <b>Therapy</b> <b>Eastside</b> <b>location</b>	Basal Ganglia Disorders: Parkinson's Disease <b>(Brooks)</b>	<b>Required</b> • See Above
<b>29 Mar</b> (Sun)	<b>REFLECTION ASSIGNMENT DUE ON BBL BY MIDNIGHT</b>		
<a href="#">Week 10</a> 30 Mar (Mon) 3-5	<b>ILC</b>	<b>Exam 2 (Patho Gait, Progressive Neurologic Changes &amp; Motor Neuron Diseases: Covering everything from Feb 18 through March 26)</b>	
31 Mar (Tue) 2-5	Lec/Lab Rm 115	Spinal Cord Injury/ ASIA <b>(Gutierrez/Goche)</b>	<b>Required</b> • Review Neuroscience SCI • Nichols-Larson Chp 12 <b>Recommended</b> • O'Sullivan Chp 20
Apr 2 (Thur) <b>Time TBD</b>	<b>CHS Sim</b> <b>Labs</b>	<b>Simulated Hospital Days (see Integrative Seminar for details and assignment)</b>	
<b>4 Apr</b> (Sat) <b>9-12</b>	Lec Rm 115	Acute Care Neuro <b>(Jimenez/Gutierrez)</b>	See BBL for required reading
<a href="#">Week 11</a> 6 Apr (Mon) 3-5	Lab Rm 115/Sim Labs	<b>Quiz 5</b> Performing ASIA on "patients" Or Bed mobility or ADL for complete paralysis <b>(Gutierrez)</b>	<b>Required</b> • Watch Exercise Video: • Exercise Considerations for persons with neurological disability part 4 SCI • TBD • See Above
7 Apr (Tue) 2-5	Lab Rm 115/113/ Sim Labs	Performing ASIA on "patients" Or Bed mobility or ADL for complete paralysis <b>(Gutierrez/Goche)</b>	
9 Apr (Thur) 8-11	Lab Rm 115/113/ Sim Labs	Performing ASIA on "patients" Or Bed mobility or ADL for complete paralysis <b>(Gutierrez/Goche)</b>	

<a href="#">Week 12</a> 13 Apr (Mon) 3-5	Lec Rm 115	Spinal Cord Injury Prognostication Psychological Issues <b>(Gutierrez)</b>	<b>Required</b> • Waters RL, Adkins R, Yakura J, Sie I. Functional and neurologic recovery following acute SCI. J of Spinal Cord Medicine. 1998; 21:195-199.
14 Apr (Tue) 2-5	Lab Rm 115/113	Spinal Cord Injury Interventions <b>(Gutierrez/Goche)</b> Spanish	TBD
16 Apr (Thur) 8-11	Lab Rm 115/113	Fun with Neuro/Prep for practical <b>(Gutierrez/Goche)</b>	TBD
<b>19 Apr</b> <b>(Sun)</b>	<b>SCI ASSIGNMENT DUE ON BBL BY MIDNIGHT</b>		
<a href="#">Week 13</a> 20 Apr (Mon) 3-5	Lec Rm 115	Spinal Cord Injury Interventions ADLs/Practice for practical <b>(Gutierrez)</b>	TBD
21 Apr (Tue) 2-5	Lab Rm 115/113	Fun with Neuro/Prep for practical <b>(Gutierrez/Goche)</b>	TBD
23 Apr (Thur) 8:00-5:00	<b>CHS Sim</b> <b>Labs</b> <b>Times TBD</b>	<b>COMBINED PRACTICAL EXAM WITH INTEGRATIVE SEMINAR II</b>	
<a href="#">Week 14</a> 27 Apr (Mon) 3-6	Lec/Lab Rm 115/ <b>community</b>	Community Reintegration <b>(Moody/Stevens/Gutierrez)</b>  Dress for walking in the community	See BBL for required readings
28 Apr (Tue) 2-4	<b>ILC</b>	<b>EXAM 3 (SCI: Covering everything from March 31 through Apr 20)</b>	
30 Apr (Thur) 8-11	Lab Rm 115/113	Tremors/ DBS <b>(Sandberg/Gutierrez/Goche)</b>	See BBL for required readings
<a href="#">Week 15</a> 4 May (Mon) 3-5	Lec Rm 115	TBD <b>(Gutierrez)</b>	TBD
5 May (Tue) 2-5	Lab Rm 115/113	Chronic Pain/ CRPS <b>(Haribhai /Gutierrez/Goche)</b>	See BBL for required readings
7 May (Thur) 8-11	Lab Rm 115/113	TBD <b>(Gutierrez/Goche)</b>	TBD

<b>TBA</b>	<b>ILC</b>	<i>FINAL WRITTEN COMPREHENSIVE EXAM</i>
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