

Interventions Neuro Disorders

PTA2460 301

Course Description

Students are introduced to common neurological and neuromuscular conditions and their impact on function. Protocols for the management and rehabilitation of patients with these disorders are presented, demonstrated, and practiced. Skill development includes the use of specialized manual techniques and treatment equipment the PTA uses in the neurorehabilitation setting.

Prereq: Successful completion of prior semester courses per established curriculum plan w/C grade or better

Coreq: PTA 2450

Semester: Summer

Course Student Learning Outcomes

- Apply knowledge from classroom work in Neurological Disorders in a lab setting to determine appropriate interventions based on the POC set up by the Physical Therapist while also considering the neurological pathology and the patient's perspective, environment, as well as other contextual personal factors. Assessment through case studies, lab activities, skill check-offs, patient simulations and practical exams.
- Correctly demonstrate and progress physical therapy interventions for the neurological client population while integrating appropriate evidenced based resources to support clinical decision making in regard to the selected interventions and the progressions of treatment.
- Recognize normal gait mechanics and be able to analyze gait in a neurological population to determine abnormal and faulty gait patterns.
- Design appropriate gait and balance interventions following gait.

- Collect, perform, and document various tests and measures designed to assess the neurological population to include sensory testing, muscle strength/length and tone, function, coordination, balance, gait, integumentary system, reflexes, and cardiopulmonary assessment.
- Analyze case studies of clients with neurological disorders and design an appropriate home exercise program.

College Wide Student Learning Outcomes

- 1) Acquire substantive knowledge
- 2) Communicate effectively
- 3) Develop quantitative literacies
- 4) Think critically
- 5) Express creatively
- 6) Knowledge and skills to be civically engaged
- 7) Work with others in a professional and constructive manner
- 8) . Develop information literacy
- 9) . Develop computer literacy

Course Prerequisites

Successful completion of prior semester courses, per established curriculum plan, with a grade of “C” or better.

Keys for Success (how to succeed in the course)

How to navigate this hybrid course

From informal surveys over the past couple of years, I have implemented changes to hopefully create a more engaging, learner-centered environment:

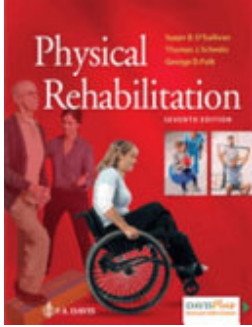
- 1) All lectures, readings, videos, assignments, discussions....everything...for each week will be under one module labelled with the content and the date of instruction.
- 2) I will use announcements to remind about assignments in the module and to change/modify any plans class time/location changes, so keep close eye on announcements.
- 3) Each week will have one in-person lecture and the remaining will be lab instruction and demonstration. It will be on Wednesday mornings in a large tiered classroom (JHS 211) on the second floor (which is the top floor). So look forward to a change of scenery!
- 4) All labs will be in-person on Mondays and Wednesdays from 10:00 to 3:30 pm with a 30 minute lunch usually around 1pm. During Labs Alex will often teach one lab while I teach the other lab and then we will switch. Sometimes labs will be combined especially with guest speakers or content that is easier to learn/practice.
- 5) Alex and I will do our best to provide timely feedback to quizzes, tests and assignments

**To get the most out of this course please try to do the pre-instructional work which will include videos, reading assignments, quizzes, worksheets and online discussions. You will have some time on Monday mornings and Tuesday afternoons to do the pre-instructional content; but, you will need also to work on homework and prep outside of class.

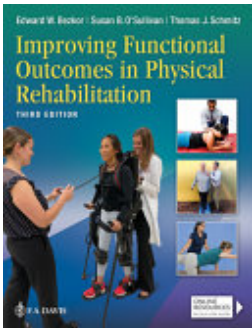
Required Text or Materials

Title: Physical Rehabilitation

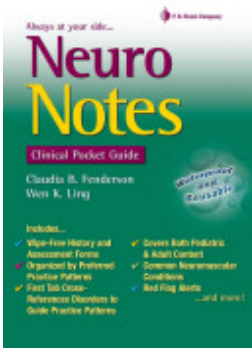
ISBN: 9780803661622



Authors: Susan B. O'Sullivan, Thomas J. Schmitz, George Fulk
Publisher: F. A. Davis Company
Publication Date: 2019-01-01



Title: Improving Functional Outcomes in Physical Rehabilitation
ISBN: 9781719640909
Authors: Ed Bezkor, Susan B. O'Sullivan, Thomas J. Schmitz
Publication Date: 2021-12-15



Title: Neuro Notes (OPTIONAL)
ISBN: 9780803617476
Authors: Claudia Fenderson, Wen K. Ling
Publisher: F A Davis Company
Publication Date: 2009-01-01

For more information on textbook accessibility, contact Accessibility & Disability Services at [REDACTED]

Class Schedule

Due Date	Assignment Name	Assignment Type	Points
6/20	Neuro Lab Skill Check Off (Part One - PNF).	Assignment	50

Due Date	Assignment Name	Assignment Type	Points
6/20	Neuro Lab Skill Check off (Part two)	Assignment	50

Brief Description of Assignments/Exams

Neurological Disorders encompasses learning the characteristics of common neurological pathologies, assessments performed by the healthcare team on clients with these disorders with a particular focus on data collection for the PTA and finally also includes physical therapy treatment strategies. This is A LOT of information to learn in 6 weeks!

To meet the learning objectives in the class you will be expected to complete all of the assignments and exams which include:

Student Evaluation: Distribution of the course grade will be as follows:

Professionalism (includes final lab clean up) 50 points

Lab Assignments and Case Studies As announced ~220 points

Great Stroke Adventure 30 points

PNF Practical Exam 50 points

Comprehensive Final Practical 100 points

Total 450 points

Grading Scale

All individual quizzes and exams will be carried two decimal points before calculating the final exam score and will be calculated without rounding. Final course grade computation will then include additional learning requirements for the course. Students must receive 77.00% on exams and quizzes before other class projects, assignments and professionalism are computed into the course grade. Failure to achieve 77.00% on all exams and/or earning less than one point in Professionalism, despite a higher composite score for the course, will result in course failure and dismissal from the Program. Please see Program Handbook for additional information. In addition, to receive credit/recognition for this course as part of the SLCC Physical Therapist Assistant

Program, the students must earn an accumulative 77.00% for all assessments as noted under Grading. The following grade scale will be used for this course:

A = 95-100% B = 86-88% C = 77-79% D = 68-70%

A- = 92-94% B- = 83-85% C- = 74-76% D- = 65-67%

B+ = 89-91% C+ = 80-82% D+ = 71-73% E = 64% and below

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. We encourage you to take advantage of these resources to help you succeed in your studies. If you

have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)