# **Musculoskeletal Disorders**

# PTA2400 301

### Instructor Information

Faculty: Phone: Email: Office Location: Office Hours

# **Course Description**

Students learn medical and surgical musculoskeletal pathologies including common treatment strategies and the involvement of physical therapy.

Prereq: Successful completion of prior semester courses per established curriculum plan w/C grade or better Coreq: PTA 2410 Semester: Spring

Students learn physical therapy interventions and treatment strategies for medical and surgical musculoskeletal pathologies.

### **Course Student Learning Outcomes**

• Identify indications, contraindications, precautions, safety considerations, goals and expected outcomes for patients in physical therapy documentation including the

initial examination and plan of care, seeking clarification from the physical therapist as needed.

- Identify when directed interventions are either beyond the scope of work or personal scope of work of the PTA.
- Explain the Comprehensive Intervention Model and its application to quality patient care.
- Communicate to the physical therapist when there are significant changes in the patient's medical status, physician referral, or when criticality and complexity of patient is beyond the knowledge, skills, and/or abilities of the PTA.
- Delineate the levels of upper and lower extremity amputation and functional impact of limb removal.
- Describe the appropriate management of lower extremity amputation including the application and adjustment of prosthetic devices.
- Describe integumentary protection and management related to musculoskeletal conditions.
- Describe clinical problem solving skills in patient care such as determining if patient is safe and comfortable with the intervention, and, if not, determine appropriate modifications; comparing results of intervention to previously collected data and determining if there is progress toward the expectations established by the PT or if the expectations have been met; and determining if modifications to the interventions are needed to improve patient response.
- Delineate the components of competent patient progression including identifying the need to progress via data collection, determining what progression can be made within the plan of care, identifying possible progressions that will continue to advance patient response, selecting and implementing the progression of the intervention, determine outcomes of the intervention, and identifying and integrating appropriate evidence based resources to support clinical decision-making for progression of the patient within the plan of care established by the physical therapist.
- Explain how psychological, social, and cultural variables may affect patient's progression with an intervention.
- Explain how to determine if patient is progressing toward goals in the plan of care; if not, determine if modifications made to the intervention are required to improve

patient response.

- Describe the collection and documentation to determine the patient's ability to use proper body mechanics during functional activity.
- Collect and document gait, locomotion and balance data including determining patient's safety and progress as well as describing gait deviations and their effect on gait and locomotion in patients/clients with musculoskeletal disorders.
- Collect and document range of motion including performing tests of joint active and passive movement, muscle length, soft tissue extensibility, tone and flexibility; and describing and measuring functional range of motion in patients/clients with musculoskeletal disorders.
- Discuss the characteristics and common disorders of the musculoskeletal system and possible physical therapy interventions.
- Express components and techniques of manual therapy.
- Expound on the components of upper extremity assessment, splinting and therapeutic interventions.
- Integrate appropriate therapeutic exercise techniques and therapeutic modalities and equipment, within the plan of care of the physical therapist, in patients/clients with musculoskeletal disorders.

### **Course Prerequisites**

Successful completion of PTA 2010/2015 and PTA 2300/2310, per established curriculum plan, with a grade of "C" or better.

### Course Content Warnings/Trigger Warnings

Students may be exposed to images and videos of orthopedic surgeries.

# Keys for Success (how to succeed in the course)

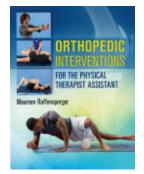
While this course is meant to teach about interventions for common musculoskeletal conditions, there is also a heavy focus on developing clinical reasoning skills and pattern

recognition. The completion of the Clinical Pattern Recognition worksheets will foster the development of these skills and success in the course.

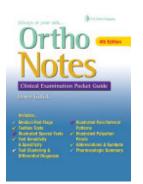
### **Required Text or Materials**

Title: PhysioU Subtitle: Required OID: <u>http://app.clinicalpattern.com</u>

Title: Visible Body Subtitle: Required OID: <u>http://courseware.visiblebody.com</u>

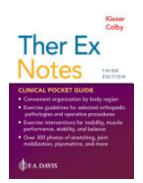


Title: Orthopedic Interventions for the Physical Therapist Assistant Subtitle: \*Optional ISBN: 9780803658950 Authors: Maureen Raffensperg Publisher: F.A. Davis Publication Date: 2019-11-05



Title: Ortho Notes Subtitle: \*Optional ISBN: 9780803677531 Authors: Dawn Gulick Publisher: F.A. Davis Publication Date: 2018-01-16

Title: Ther Ex Notes Subtitle: \*Optional ISBN: 9781719649230 Authors: Carolyn Kisner, Lynn Allen Colby Publisher: F.A. Davis



#### Publication Date: 2022-10-17

For more information on textbook accessibility, contact Accessibility & Disability Services

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# **Class Schedule**

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
	<u>Orthopedic Disorder</u> <u>Handouts</u>	Discussion	0
	<u>Pathology</u> <u>Powerpoints</u>	Discussion	0
	<u>Spring 2024 Course</u> <u>Evaluations</u>	Assignment	5
1/13	Evidence Based Practice Quiz	Quiz	15
1/21	<u>PhysioU MacroSIM -</u> <u>Ankle &amp; Foot</u>	Assignment	10
1/27	<u>PhysioU MacroSIM -</u> <u>Knee</u>	Assignment	10
2/3	<u>PhysioU MacroSIM -</u> <u>Hip</u>	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
2/4	<u>NO Exam 1: Lower</u> Extremity - Ankle & Foot, Knee, and Hip & Pelvis	Quiz	0
2/8	<u>Exam 1: Lower</u> <u>Extremity - Ankle &amp;</u> <u>Foot, Knee, and Hip</u> <u>&amp; Pelvis</u>	Quiz	78
2/8	Exam 1 Anatomy ID	Assignment	20
2/24	<u>PhysioU MacroSIM -</u> Lumbar Spine	Assignment	10
2/28	<u>PhysioU SIM -</u> <u>Cervical Spine</u>	Assignment	10
2/29	<u>Exam 2: Spine and </u> <u>TMJ</u>	Quiz	45
2/29	Exam 2 Anatomy ID	Assignment	20
3/16	<u>PhysioU MacroSIM -</u> <u>Shoulder</u>	Assignment	10
3/23	<u>PhysioU MacroSIM -</u> <u>Elbow</u>	Assignment	10
3/30	<u>PhysioU MacroSIM</u> <u>Wrist &amp; Hand</u>	Assignment	10
4/1	<u>Graston MedBridge</u> <u>Course IASTM-</u> <u>palooza Prep</u>	Assignment	0
4/5	Exam 3 Anatomy ID	Assignment	30
4/5	<u>Exam 3: Upper</u> <u>Extremity - Shoulder,</u> <u>Elbow, Wrist &amp; Hand</u>	Quiz	54

Due Date	Assignment Name	Assignment Type	Points
4/18	Dry Needling	Assignment	0
4/19	<u>Common Orthopedic</u> <u>Surgical</u> <u>Considerations</u> <u>Presentations</u>	Assignment	40
4/27	<u>MedBridge Self-study</u>	Assignment	25
4/27	<u>Pain Neuroscience</u> and Pain <u>Neuroscience</u> <u>Education (PNE) Self</u> <u>Study</u>	Assignment	30
5/1	<u>Course Concepts</u> <u>Synthesis Assessment</u>	Quiz	62
5/1	Final Anatomy ID	Assignment	25
5/1	ePortfolio Reflection	Assignment	25
5/1	Professionalism	Assignment	50
5/3	<u>The Role of Multi-</u> <u>Vector Resistance in</u> <u>Functional Rehab</u> <u>Supplemental</u> <u>Learning Opportunity</u>	Assignment	5

# Brief Description of Assignments/Exams

Assignments and exams are designed to reinforce learning, course content, and critical/clinical reasoning.

Exams must be passed with a minimum score of 79% (C). If scores fall below this threshold, students have the opportunity to submit test corrections. Each corrected

question is valued at 50% of its original point value. This allows students to raise their overall score to the minimum passing grade of 79% by

To initiate this process, students are required to meet with the instructor for a review of the missed questions. The completed test corrections should be submitted in the "Comments" section of the exam. Corrections can be directly entered into the comment box or attached as a separate file.

### **Grading Scale**

Α	95-100%	В	86-88%	С	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%	Е	64% and below

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

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