

PHT 6771
Musculoskeletal Disorders II
Fall 2013

Course Description: This course will provide the student with an understanding of techniques and rationale used in the examination, evaluation and treatment of hip, spine and upper extremity musculoskeletal dysfunction. Examination and treatment techniques will be demonstrated and practiced in laboratory sessions. Clinical problem-solving processes will be discussed and practiced in class. Content provided in previous courses and in concurrent courses will be incorporated.

Course prerequisites: PHT 6187C, 6206C, 6605C, 6188C, 6189C, 6207C, 6152C, 6770

Course Offered by: Department of Physical Therapy, College of Public Health and Health Professions, University of Florida

Credits: 4 credits

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Meeting Place/Clock hours: Room 1104 and assigned clinics
6-14 hours/week (classroom and clinic visits)

Course Objectives:

Upon completion of the course, the student will be able to:

1. Musculoskeletal Examination and Evaluation
 - 1.1. describe the mechanisms of common injuries of the spine and upper extremity
 - 1.2. describe the signs and symptoms of common spine and upper extremity musculoskeletal disorders
 - 1.3. describe relationships between patient history and common dysfunctions of the spine and upper extremity
 - 1.4. discuss the principles behind the testing of joint motion, muscular strength and endurance, muscle flexibility and ligamentous integrity

- 1.5. discuss and apply basic and advanced components of the musculoskeletal examination to the spine and upper extremity
- 1.6. adapt examination techniques based on patient limitations
- 1.7. conduct and record a comprehensive musculoskeletal history and physical examination
- 1.8. describe the differential diagnoses for common injuries of the spine and upper extremity
- 1.9. determine patient prognoses based on patient history and examination findings
2. Musculoskeletal Treatment
 - 2.1. discuss how to determine realistic goals of treatment and functional outcomes that specify expected treatment frequency and duration
 - 2.2. discuss the need to collaborate with patients, family members, payers, and other professionals in determining realistic goals of treatment
 - 2.3. demonstrate knowledge of bone and soft tissue repair and its application in treatment of musculoskeletal pathology
 - 2.4. discuss common musculoskeletal treatment schemes and the rationale for each scheme
 - 2.5. discuss treatment alternatives and describe how treatments can be adapted for individual patient circumstances
 - 2.6. discuss how orthopedic treatments are progressed from the initial evaluation through patient discharge and follow-up
 - 2.7. identify contributions and limitations of therapeutic exercise within the context of specific pathological processes
 - 2.8. demonstrate skill in the application of orthopedic treatment techniques including joint mobilization, joint manipulation, specific exercises, dynamic stabilization, and functional training
 - 2.9. develop appropriate re-evaluation strategies and demonstrate the ability to make changes in treatment plans consistent with re-evaluative findings
3. Musculoskeletal Practice
 - 3.1. recognize the importance of individuality and dignity of the patients
 - 3.2. demonstrate how to practice in a safe and ethical manner that minimizes risk to the patient and therapist
 - 3.3. demonstrate the ability to instruct patients in appropriate exercise technique
 - 3.4. discuss when and how to delegate responsibilities to the patient, support staff, and other professions
 - 3.5. demonstrate awareness of considerations for clinical practice (e.g. time management, personality conflicts, incorporation of evidence into practice, etc.)

Teaching Methods: Lecture, laboratory, discussion, clinical observation and guided case studies

Required Textbooks:

Dutton, Orthopaedic Examination, Evaluation and Intervention

Kisner & Colby, Therapeutic Exercise: Foundations and Techniques

****Specific readings will be announced prior to the associated class****

CLASS SCHEDULE

Date	Topic	
Aug 22	Fall Syllabus and Semester Review Hip Joint	
27	Hip Joint	
29	LAB A	<p><u>TOPIC:</u> Treatment Based Classification for Low Back Pain</p> <p><u>ASSIGNMENTS</u></p> <ol style="list-style-type: none"> 1) Introduction to LBP 2) Red/ Yellow Flags 3) Introduction to Treatment Based Classification 4) Stage I Stabilization and Manipulation Categories 5) Stage I Specific Exercise and Traction Part 1 6) Stage I Specific Exercise and Traction Part 2
Sept 3	LAB B	<p><u>TOPIC:</u> Treatment Based Classification for Low Back Pain</p> <p><u>ASSIGNMENTS</u></p> <ol style="list-style-type: none"> 1) Introduction to LBP 2) Red/ Yellow Flags 3) Introduction to Treatment Based Classification 4) Stage I Stabilization and Manipulation Categories 5) Stage I Specific Exercise and Traction Part 1 6) Stage I Specific Exercise and Traction Part 2
5	LAB A	<p>Quiz 1</p> <p><u>TOPIC:</u> Treatment Based Classification for Low Back Pain (Continued) AND Specific Pathologies of the Lumbar Spine and Sacroiliac Joint</p> <p><u>ASSIGNMENTS</u></p> <ol style="list-style-type: none"> 1) Stage II 2) Stage III/ Posture advice 3) Clinical Application of TBC Red and Yellow Flags 4) Clinical Application of TBC Clinical Examination 5) Utilization in the Face of Uncertainty 6) SIJ 7) Specific Diagnosis
10	LAB B	<p>Quiz 1</p> <p><u>TOPIC:</u> Treatment Based Classification for Low Back Pain (Continued) AND Specific Pathologies of the Lumbar Spine and Sacroiliac Joint</p> <p><u>ASSIGNMENTS</u></p> <ol style="list-style-type: none"> 1) Stage II 2) Stage III/ Posture advice 3) Clinical Application of TBC Red and Yellow Flags 4) Clinical Application of Clinical Examination 5) Utilization in the Face of Uncertainty 6) SIJ 7) Specific Diagnosis
12	Case Study (Lumbar Spine)/ Lumbar Competency	

17	LAB A	<p><u>TOPIC: Thoracic Spine</u> <u>ASSIGNMENTS</u></p> <ol style="list-style-type: none"> 1) Thoracic spine anatomy, red flags, yellow flags 2) Thoracic spine clinical examination 3) Thoracic spine interventions 4) Rib assessment and treatment 5) Thoracic spine specific diagnosis
19	LAB B	<p><u>TOPIC: Thoracic Spine</u> <u>ASSIGNMENTS</u></p> <ol style="list-style-type: none"> 1) Thoracic spine anatomy, red flags, yellow flags 2) Thoracic spine clinical examination 3) Thoracic spine interventions 4) Rib assessment and treatment 5) Thoracic spine specific diagnosis
24	LAB A	<p><u>TOPIC: Cervical Spine</u> <u>ASSIGNMENTS</u></p> <ol style="list-style-type: none"> 1) Cervical Spine Anatomy 2) Cervical Red Flags 1 3) Cervical Red Flags 2 4) Cervical Assessment 1 5) Cervical Assessment 2 6) Cervical Treatment and TBC 7) Cervical TBC and TOS
26	LAB B	<p><u>TOPIC: Cervical Spine</u> <u>ASSIGNMENTS</u></p> <ol style="list-style-type: none"> 1) Cervical Spine Anatomy 2) Cervical Red Flags 1 3) Cervical Red Flags 2 4) Cervical Assessment 1 5) Cervical Assessment 2 6) Cervical Treatment and TBC 7) Cervical TBC and TOS
Oct 1	LAB A	Quiz 2
		<u>TOPIC: Cervical Spine</u>
3	LAB B	Quiz 2
		<u>TOPIC: Cervical Spine</u>
8		Case Study (Cervical/Thoracic)/ Cervical/ Thoracic Competency
10		Practicals
15		Exam
17		TMJ
22		TMJ
24	LAB A	<p><u>TOPIC: Shoulder</u> <u>ASSIGNMENTS</u></p> <ol style="list-style-type: none"> 1) Introduction and Shoulder Anatomy 2) General Evaluation and Treatment Considerations 3) Instability 4) Impingement 5) Rotator Cuff Tendonitis and Tears

29	LAB B	<u>TOPIC: Shoulder ASSIGNMENTS</u> 1) Introduction and Shoulder Anatomy 2) General Evaluation and Treatment Considerations 3) Instability 4) Impingement 5) Rotator Cuff Tendonitis and Tears
31	LAB A	Quiz 3 <u>TOPIC: Shoulder ASSIGNMENTS</u> 1) Other Shoulder Injuries 1 2) Other Shoulder Injuries 2 3) Post-Operative Management 4) Return to Sport
Nov 5	LAB B	Quiz 3 <u>TOPIC: Shoulder ASSIGNMENTS</u> 1) Other Shoulder Injuries 1 2) Other Shoulder Injuries 2 3) Post-Operative Management 4) Return to Sport
7		Shoulder Competency
12		Case Study (Shoulder)
14		Elbow
19		Elbow/Wrist
21		Quiz 4 Wrist/Hand
26		Elbow/wrist/hand Competency
29		NO CLASS -Thanksgiving
Dec 4		Practicals
11		Final Exam (8:30 – 10:00)

Topic order is subject to change and will be announced in class

Where indicated, lecture material will be recorded and available on Sakai. Students are required to view the lectures prior to the scheduled class time and to come to class prepared to discuss the content.

Testing and Grading: Students' performance will be assessed by written and practical examinations and written assignments. Grading is according to the Department of Physical Therapy Student Handbook.

Clinical visits	26.7%	40 points
Exam 1	20%	30 points
Exam 2	20%	30 points
Quiz	13.3%	20 points
Case Study Assignments (3)	20%	30 points
Total	100%	150 points

****All scores/grades will be posted on Sakai****

Grading Scale:

Grade Scale	Grade	Grade Points	Minimum Points Required
93 - 100	A	4.00	139.5
90 - 92	A-	3.67	135
87 - 89	B+	3.33	130.5
83 - 86	B	3.00	124.5
80 - 82	B-	2.67	120
73 - 76	C	2.00	109.5
63 - 66	D	1.00	94.5
<60	E	0.00	< 94.5

Quizzes: A total of 4 quizzes worth 5 points each will be given during the semester.

Exams: Students receiving a grade of "C" or less on an exam should schedule an appointment to meet with the primary instructor. Students will be able to review their exams with the answer key the week following return of the exams. Questions missed by the majority of the students will be discussed in class. Students wishing to discuss exam questions should schedule individual appointments.

Case Studies: Three guided case studies will be conducted during the semester. The case studies will emphasize the development of critical thinking skills in examination, evaluation and intervention through small group discussion following written, video or live patient case presentation. A written assignment will be completed after each case presentation. The due date will be announced in class. Assignments are to be typed (except SOAP or Patient/Client Management notes) and placed in the student drop box.

Competencies: Competencies will be used to assess proficiency in the application of manual techniques. Students that exhibit unacceptable or unsafe technique will be required to retake the competency and will have one point deducted from their grade. A written assignment may be given if the manual technique is applied correctly, but knowledge of the concepts behind the technique is lacking.

Practical Examination: Practical examinations will be used to assess problem-solving skills in examination, evaluation and the formulation of an intervention for a clinical case. Practical examinations will be graded as pass-fail based on the accumulation of points. Students that exhibit unacceptable or unsafe performance will be provided one opportunity to retake the practical examination and will have three points deducted from the overall grade. Students must successfully pass the practical examination in order to pass the course.

Attendance/Illness: It is expected that all students attend **ALL** class (lecture and laboratory) sessions. Students who are ill should contact the front office before class starts and should meet with the primary instructor regarding missed material.

Lab Set-up and Clean-up: Everyone is responsible for the clean-up of their own space and equipment, however, students will be assigned to return tables to an orderly arrangement on a rotating basis. Absence from a set-up or clean-up assignment without an excuse will result in a loss of professional behavior points.

Laboratory Activities: In order to expose bony landmarks etc. for visual orientation and palpation, students **must** have the proper laboratory attire as outlined in the student handbook. Nails **must** be

trimmed short for palpation (for your lab partner's safety). Students are expected to be active participants in laboratory activities and maintain professional conduct. All instances of improper attire or unprofessional conduct will be documented in the students' professional development file.

Academic Honesty: Per the University of Florida Department of Physical Therapy student handbook, students are required to abide by the UF Academic Honesty Guidelines. The following pledge has been accepted by the University and is expected of all students:

“I understand that the University of Florida expects its students to be honest in all of their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action, up to and including expulsion from the University.”

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by UF students, the following pledge is either required or implied:

“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

Accommodations for Students with Disabilities: Students requesting classroom accommodations must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide the documentation to the course instructor when requesting accommodation.