

9-2014

PT 569.01: Musculoskeletal Management II

Elizabeth Ikeda

University of Montana - Missoula, elizabeth.ikeda@umontana.edu

Ryan L. Mizner PT, PhD

University of Montana - Missoula, ryan.mizner@umontana.edu

Anthony E. Kinney

University of Montana - Missoula, anthony.kinney@umontana.edu

Let us know how access to this document benefits you.

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

Recommended Citation

Ikeda, Elizabeth; Mizner, Ryan L. PT, PhD; and Kinney, Anthony E., "PT 569.01: Musculoskeletal Management II" (2014). *Syllabi*. 2159.

<https://scholarworks.umt.edu/syllabi/2159>

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

PT 569 MUSCULOSKELETAL MANAGEMENT II
FALL SEMESTER – 2014

Course Coordinator:

Elizabeth (Beth) Ikeda, PT, DPT, MS, MTC, OCS
Skaggs building Room 103
elizabeth.ikeda@umontana.edu
243-5190

Ryan Mizner, PT, PhD
Skaggs building Room 109
ryan.mizner@umontana.edu
243-5183

Toby Kinney, PT, DPT, OCS
Skaggs building Room
antonykinney@umontana.edu
243-4684

Teaching assistant:

Audrey Elias, DPT, OCS
Movement Science Laboratory
243-2609

CREDITS: 4

CONTACT HOURS: 100

CLASS Times: Monday, Wednesday and Friday 8:10-12:00 and Wednesdays 1:10-3

LOCATION: 336 and 020 (lab)

PREREQUISITE COURSES: Prior coursework and concurrent enrollment in the Fall DPT curriculum

COURSE DESCRIPTION: This course will address the examination, evaluation and intervention of musculoskeletal disorders of the lumbar spine, sacroiliac joint, hip, knee, ankle, and foot. Competency of course material from the entire past curriculum is required for this course as it will be integrated and expanded upon in this class. The evaluation and diagnosis process will be reviewed and refined as it relates to specific physical therapy and pathologic diagnoses. Included in this course are examination techniques and interpretation, differential diagnosis, joint mobilization techniques, and advanced and integrative therapeutic exercise prescription, advanced modalities and biomechanics when designing an intervention plan.

REQUIRED TEXTS:

1. Diagnosis & Treatment of Movement Impairment Syndromes. Sahrmann. ISBN 978-0-8016-7205-7
2. Movement System Impairment Syndromes of the Extremities, Cervical and Thoracic Spines. Sahrman. ISBN 978-0-323-05342-6
3. Therapeutic exercise: Moving towards function. Hall and Brody. 2nd Edition.
4. Orthopedic Physical Assessment (W/Cd). Magee. 5th Edition. ISBN 978-0-7216-0571-5
5. Medical Imaging in Rehabilitation DVDs from Rehab Essentials. McKinnis, Tepper, and Elrod

SUPPLEMENTAL OPTIONAL TEXTS:

Magee: Orthopedic Assessment

Atlas of Human Anatomy

Neuman: Kinesiology of the Musculoskeletal System

Kisner and Colby: Therapeutic Exercise Foundations and Techniques

McKinnis: Fundamentals of Musculoskeletal Imaging (*On reserve in Skaggs Library*)

COURSE OBJECTIVES: Upon completion of the course, the student will be able to address the following:

1. Develop your skills of interview and examination as well as review of medical and physical therapy records and data for developing a differential diagnosis.
2. Determine which components of the musculoskeletal, neuromuscular, integumentary, and cardiopulmonary systems require a comprehensive examination.
3. Complete the appropriate tests and measures to identify the patient's disabilities, functional limitations and impairments.
4. Synthesize the information obtained from the physical examination to develop a hypothesis regarding the cause(s) of the presenting problem(s).
5. Effectively prioritize the patient's movement dysfunction and impairments for appropriate physical therapy intervention.
6. Efficiently and accurately determine a prognosis that gives the predicted level of improvement and the amount of time required to reach that level.
7. Identify the function and purpose of lower extremity orthoses as part of physical therapy management.
8. Identify the signs and symptoms of improper bracing.
9. Effectively and efficiently find subtalar neutral as part of making a plaster mold foot orthosis.
10. Identify the components of a pre-LE orthosis examination and state the rationale for each component of the examination.
11. Compare and contrast the design and functional differences of varying types of lower extremity orthoses as they are used as part of physical therapy management of the patient.
12. When provided a lower extremity orthosis, be able to identify the component parts and material used to make the device and provide rationale for adjusting those key parts as part of the orthosis prescription.
13. Synthesize the relevant information from a patient's individual case to develop a plan of care designed to optimize the patient's function and minimize the patient's disability.
14. Implement an evidence-based plan of care in a competent, safe, ethical and legal manner.
15. Provide effective instruction to the patient, family members and/or caretakers in the required procedures for safe and effective care of the patient.
16. Demonstrate cultural competence and entry-level clinical efficiency during the physical therapy examination and intervention process.
17. Design an appropriate home program consistent with the patient's disabilities, activity limitations and body structural impairments and contextual limitations.
18. Re-examination and evaluate the effectiveness of physical therapy interventions on minimizing functional limitations and disabilities and optimization of health status.
19. Re-assess and modify the plan of care as needed
20. Create an effective health promotion and wellness plan to address the non-identified patient problems that require a skilled physical therapy intervention recognizing that physical therapists practice autonomously.

COURSE STRUCTURE: Through lecture and guided laboratory experience students will refine their evaluation skills by integrating biomechanics, anatomy, physiology, and pathology to develop effective therapeutic interventions when faced with a clinical scenario. Case studies are integrated throughout the course. Lab time is used to develop the psychomotor and communication skills needed to effectively deliver the interventions and complete advance examination techniques. Readings are listed in the Course Schedule and are used to supplement the lecture/lab material. Each instructor will share the level of emphasis of their readings to the course content.

SUPPLEMENTARY MATERIALS

- A. Handouts, videos, professional references, textbooks, website links
- B. Moodle registration is mandatory (<http://umonline.umt.edu/>). Please be sure to update your personal info regularly as well as checking your email daily for the latest updates.

MUSCULOSKELETAL IMAGING CONTENT

Musculoskeletal Imaging is a crucial component of all areas of physical therapy practice. Students are expected to watch the Chapters in the CD ROM and go to the McKinnis Imaging text as needed to cover the areas discussed in class. The material will be covered in each unit with images routinely used in lecture as well as the role of imaging discussed in context to practice when appropriate. This material will be tested on in practical and written exam along with the rest of the material in course.

METHODS OF EVALUATION:

Written Exams 1 (lumbar/hip region)	30%
Practical Exam 1 (lumbar/hip region)	10%
Written Exam 2 (knee)	20%
Practical Exam 2 (knee, foot/ankle)	10%
Final Exam (foot/ankle & comprehensive)	30%
	100%

GRADING SYSTEM:

Percentage	Grade	Grade Point
90-100	A	4.0
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0

Students must achieve an overall average \geq 73% to pass the course.
No repeats will be provided for written exams.
Students are responsible to ensure they are prepared before taking their exams.

PRACTICAL EXAMS: Students are required to show competency in all areas of physical therapy examination/evaluation/ plan of care/ interventions to pass the course. If a practical is failed and retaken, then the retake score can be for no more than 73% even if the student scores higher than 73% on the retake. The remade practical exam shall be of the same format and the student needs to score over 73% on the retake to pass. Any additional retakes are up to the discretion of the instructors.

Academic Honesty:

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code.

The Code is available for review online: <http://life.umt.edu/vpsa/documents/StudentConductCode1.pdf>

Professional Behaviors:

Professional behaviors are expected in the course and are detailed in the student handbook.

Unprofessional conduct by a student when involved in school work, in and out of the department, may also be considered grounds for unsatisfactory progress in the program and is subject to review by the Academic Requirements Committee and potentially the Dean of the College of Health Professions & Biomedical Sciences. Also, please refer to the "Generic Abilities" section in your student handbook.

Unprofessional behavior will be subject to disciplinary action as per the discretion of the instructor. No cell phones or texting will be allowed in class unless otherwise arranged with the instructor. Use of laptops to take notes is allowed, but use of the internet to browse for unrelated topics and internet is distracting to the classroom experience and your peers is prohibited.

The School's Policy on Cellular Devices, Audio & Video recording:

Cellular devices must be turned off and stowed during class. Use of a cellular device for class-related activities (calculator, for example) is permissible upon request of the instructor but texting, web access use of the device in any communicative mode is prohibited unless otherwise permitted by an individual

faculty member for his or her course. Audio or video recording of lectures or laboratory classes without written permission by the instructor or faculty member is strictly prohibited. Failure to abide by this policy is an infringement of copyrights afforded to faculty members and considered a violation of The University of Montana Student Conduct Code.

Under certain circumstances (student missing class due to illness or other excused absence), faculty may choose to videotape their own classes for educational purposes. These recordings are the property of the faculty and must be returned to that faculty member. Students shall not copy or distribute the recordings.

STUDENT'S RESPONSIBILITY:

- 1) Inform your instructors if you have any *conditions that may affect your tolerance* to manual therapy including joint pain, ligamentous instability, systemic disease, congenital bony or joint anomaly, pregnancy, etc. Please contact your instructors and DSS as soon as possible if you require special accommodation.

- 2) Be sensitive to your body's needs and limitations. During class, techniques are practiced and refined by repetition. Sometimes minor joint soreness can result. Inform your partner if his or her technique is too vigorous or if you need to decline from being a patient to give your joints a rest.

- 3) Be timely to class. Regular and punctual attendance and participation at all scheduled classes and laboratories is expected and required. Absences seriously impact good academic performance making it impossible to receive instruction, obtain knowledge, or gain the skills necessary to practice physical therapy. Missing class limits your classmates' ability to practice and learn from your input. Material presented in class is designed for you to be competent in the areas of musculoskeletal practice and the success of the program. If an absence is necessary, the student is to notify the School before the start of classes that day. Such absences, however, do not lessen the student's responsibility to meet the class requirements. Unexcused absence will result in a 2% reduction in the students overall percentage for the class for each miss.

- 4) Come prepared with appropriate lab attire. Men wear shorts and tee shirts, women wear shorts and sports bras/bathing suit tops. You may wear sweatshirts/pants to stay warm until lab begins. Change to lab clothes before class starts. Students are assigned lab numbers as posted on the corkboard for 020 and there are assigned and rotating partners through the semester. Please, I am asking for no hats to be worn in class or lab. Please clean up the lab area at the end of class.

Students with Identified needs:

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with DSS, please contact them in Lommasson 154. Students are responsible for notifying the instructor of a need for accommodation. Once DSS has verified your disability, we can work together to coordinate your reasonable modifications. For more information, visit the Disability Services for Students website at <http://life.umt.edu/dss>.

Monday	Tuesday	Wednesday	Thursday	Friday
25 Lumbar spine/SIJ/hip 8-12 Pathology	26	27 Lumbar spine/SIJ/hip 8-12 Pathology 1-3 ancillary tests	28	29 Lumbar spine/SIJ/hip 8-12 Ancillary tests
SEPT1 LABOR DAY	2	3 Lumbar spine/SIJ/hip 8-12 and 1-3 Manual therapy	4	5 Lumbar spine/SIJ/hip 8-10 tape brace 10-12 McKenzie + MSS
8 Lumbar spine/SIJ/hip 8-11 MSS and TBC 11-12 Quiz	9	10 Lumbar spine/SIJ/hip 8-10 function, basic ex, exercise progression	11	12 Lumbar spine/SIJ/hip 8-10 exercise, cont 10-12 Pt demo
15 Lumbar spine/SIJ/hip 8-10 Pt demo discussion 10-12 Sm group exams	16	17 Lumbar spine/SIJ/hip 8-12 sm group discussion 1-3 review	18	19 Knee
22 Knee	23 Lumbar/SIJ/Hip Practical exams in afternoon 4 hours	24 Knee	25 Lumbar/SIJ/Hip Written exam in afternoon	26 Knee
29 Knee 8-10 Ankle/foot 10-12	30	OCTOBER 1 Ankle/foot	2	3 Ankle/foot
6 Ankle/foot	7	8 Ankle/foot	9	10 Ankle/foot
13 Final?	14 Final?	15	16	17

Cumulative final