PT 516.01: Movement System Examination and Evaluation

Elizabeth Ikeda
University of Montana - Missoula, elizabeth.ikeda@umontana.edu
Movement System Exam and Evaluation I, PT 516
Syllabus Fall 2014

Professors: Elizabeth (Beth) Ikeda, PT, DPT, MS, MTC, OCS
Jennifer Bell PT, ScD, COMT

Student Lab assistants:

Course Description:
Credit hours: 5

Tests: 6 quizzes (MONDAYS), 2 practical exams, cumulative final

REVIEWING TESTS IN OFFICE ONLY!!! do not remove and do not photograph or copy the tests

Time: Monday, Wednesday, Friday 8-12, Thursday 1-3

Location: Lectures- Skaggs 025
Labs - 020

Course description: The focus is on the examination, and evaluation of the movement system with some clinical reasoning. This course is the basis of testing and measurement for all future clinical classes. Content includes musculoskeletal observation, posture assessment, palpation, goniometry, manual muscle testing, and joint play assessment, for the spine and lower extremities. The introduction to radiology course is on CD.

Teaching methods, learning experiences: The class includes lecture, guided laboratory experience, study questions are provided to help with application and integration of material. Case studies are used in class. Written and practical exams are designed as learning tools as well as assessment. Radiology unit is a SELF-PACED unit using the McKinnis CD and you will be tested on chapters 1-4 the first week of school, winter semester.

Required Texts (please complete assigned reading before class):
LAB MANUALS – developed by faculty, will be given to you
Kendall, FP: Muscles, testing and function with posture and pain, 5th ed
Netter, FH: Atlas of Human Anatomy
Magee, D: Orthopedic Assessment 5th ed
Hall and Brody: Therapeutic Exercise
Neumann DA: Kinesiology of the Musculoskeletal System
American Physical Therapy Association Guide to PT Practice

**Required materials: iclicker, goniometer, reflex hammer
**Recommended resource texts** for movement system exam:

- Kisner and Colby: Therapeutic Exercise
- Cyriax J: Textbook of Orthopedic Medicine
- Donatelli: Orthopedic Physical Therapy
- Hertling: Management of Common Musculoskeletal Disorders
- Hoppenfeld: Physical Examination of the Spine and Extremities
- Ciccone, C.D. *Pharmacology in Rehabilitation, 4th ed.*, F.A. Davis

**Study questions:** You will be provided with study questions. You are not required to answer these questions. You may make an appointment to discuss the answers to the questions with the faculty.

**October**

15  Intro to measurement  Beth  
**Reading:** Magee- pp28-34, 54-57  
Posture- basic principles  Beth  
**Reading:** *SCAN* Magee, chapter 15- use handouts

16  Lower Extremity (LE) Palpation- see Manuals

17  Posture lab/ observation-  
LE palpation continued

20-27  LE: Palpation, Goniometry, length tests, Manual muscle testing (MMT)

**READING**-  see Manuals that are handed out in class, Kendall book, Anatomy Trails, and Netter, as appropriate for remainder of class. See attached calendar for general content.

**October 29- November 10**

Upper extremity (UE): Palpation, Goniometry, length tests, MMT

**November** 12+ 13  Spine palpation

*November 14  PRACTICAL EXAM 1 (between 7:30 am and 12:30) you will be assigned times and partners

November 17 and 19:  Spine goniometry and MMT

November 20 and 21:  Neurologic screening- myotomes, dermatomes, and reflexes  
**Reading:** Magee pp20- 28, 50-54

November 21 (second hour) Joint play lecture

November 24 Joint play LE
26-28 Thanksgiving vacation

**DECEMBER**

1, 3, 4 Joint Play

5 Review

FINAL EXAM – TBA

**Evaluation:**

- 6 quizzes (25 each) 150
- Final comprehensive 200
- Practical 1 10
- Final Practical 20

380 total

**Grading Scale:**

All course components must be successfully completed with a C or better (≥73%).

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
<th>Grade Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>87-89</td>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>83-86</td>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>80-82</td>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>77-79</td>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>73-76</td>
<td>C</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**WRITTEN EXAMS:** Opportunities to retake written quizzes or the final exam due to a failing grade will not be available. Test and exam results will be available on Moodle.

**PRACTICAL EXAMS:** Students are required to show competency to pass the course. A practical exam must be retaken if the score is less than 73%. The original grade will be entered into the record.

Practical exams are given over a period of hours/day, so there are times when some students have completed the exam while others are still studying. In order to insure equality of testing procedures for all students please adhere to the following regulations:

1. Do not solicit any information from students who have already taken the exam.

2. Do not discuss any part of the exam with classmates who have not taken the exam (or with someone else in their presence). This is considered academic misconduct (see below).

3. While practical exams are being given do not use the equipment that might be used during the exam.

4. While practical exams are in session do not study, practice, or otherwise loiter in the exam area.
Attendance/Remediation Policy:
Students are required to attend all lectures/labs and arrive on time for class. If the student is absent or late for class, it is the student’s responsibility to notify the course instructor in a timely manner. Beth Ikeda 243-5190 or (emergency only: home 728-6858) or leave a message with the office (243-4753).

Excused absence: An excused absence must be verified as excused by the instructor. Excused absences may include, but are not limited to, illness, accidents, or family crisis. A student with a verified excused absence will still be responsible to make-up work that was missed and he/she is responsible to coordinate remediation with the course instructor. Students will be allowed fair and equitable remediation for missed class material.

Unexcused Absence – An unexcused absence will result in score of zero for missed assignments, quizzes, and/or exams that were scheduled for the time that was missed. In addition, each lab/lecture that was missed will result in a reduction of 1% of the final grade for the course.

Note: Attendance will be tracked through the use of the iclicker system. If you fail to use your iclicker during lab/lecture, it will appear as an absence.

Academic Integrity:
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/SA/documents/fromWeb/StudentConductCode1.pdf

For information on plagiarism please visit these links:
http://www.rbs2.com/plag.htm
http://owl.english.purdue.edu/owl/resource/589/01/

For help with references:
http://www.apastyle.org/elecref.html

Professional Behaviors:
Professional behaviors are expected in the classroom. These include (but are not limited to): taking responsibility for one’s own learning, taking responsibility for one’s own work (no cheating or plagiarism), completing group and individual assignments in a timely manner, coming to class on time (unless excused), coming to class prepared, treating fellow students, staff, and faculty with respect, and receiving and giving constructive criticism when appropriate. Cell phones should be turned off and put away. Lap top computers may be used to take notes and, when appropriate, search the web for information pertaining to the topic being discussed in class. Other uses of personal computing and communication devices in class are prohibited. Students causing distraction to other students or the instructor will be asked to leave the room for the remainder of the day.

Please refer to the "Professional Abilities" section in your student handbook. Unprofessional behavior will be subject to disciplinary action.
**Dress code:**
Lecture: No hats/caps in the classroom.

Lab: The lab components of the course are detailed in the class schedule. You are responsible to come dressed appropriately for lab. If you are not properly dressed for lab you will be asked to go change into appropriate attire.

**Teaching Methods and Learning Experiences**
This course combines lecture materials with lab activities designed to enhance the students' knowledge and understanding of biomechanical principles and their application to clinical problems. Students will be expected to verbally participate in class, respond to questions through the use of iclicker technology, and participate fully in hands-on lab activities.

**Disabilities:** *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 DSS in Lommasson 154. I will work with you and DSS to provide an appropriate accommodation. Please contact us as soon as possible if you have a documented disability.*

**QUESTIONS?** If you have any questions or problems, feel free to contact Beth (course coordinator) at 243-5190, 728-6858 (home) or leave a message in the office. Remember that I am available to help you outside of class, but you must take the responsibility to come to me. Asking for help is **NOT** a sign of weakness—we (PT's) would be out of business if people did not ask for help.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTOBER 13</td>
<td>14</td>
<td>15 8:10- Introduction to testing: Beth 10:10- Posture lecture: Beth</td>
<td>16 1:10- LE palpation: Jenn</td>
<td>17 8:10-Posture lab: Beth 10:10- LE Palpation: Jenn</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Activity</td>
<td>Time</td>
<td>Activity</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>---------------------------</td>
<td>------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>November 3</td>
<td>8:10-</td>
<td>UE Goniometry: Jenn</td>
<td>10:10-</td>
<td>UE MMT: Beth</td>
</tr>
<tr>
<td></td>
<td>UE Length tests: Beth</td>
<td></td>
<td></td>
<td>UE MMT: Beth</td>
</tr>
<tr>
<td>4</td>
<td>8:10-</td>
<td>Review: Beth and Jenn</td>
<td>10:10-</td>
<td>Spine Palpation: Jenn</td>
</tr>
<tr>
<td></td>
<td>UE MMT: Beth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>8:10-</td>
<td>Spine MMT: Beth</td>
<td>10:10-</td>
<td>Joint play L E : Beth</td>
</tr>
<tr>
<td></td>
<td>UE MMT: Beth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>veteran's day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>8:10-</td>
<td>Review: Beth and Jenn</td>
<td>10:10-</td>
<td>Spine Palpation: Jenn</td>
</tr>
<tr>
<td></td>
<td>Spine goniometry: Jenn</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1:10-</td>
<td>Spine palpation: Jenn</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8:10-</td>
<td>Joint play L E : Beth</td>
<td>10:10-</td>
<td>Joint play Spine: Beth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>8:10-</td>
<td>Joint Play UE: Jenn</td>
<td>10:10-</td>
<td>Joint play UE: Jenn</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 1</td>
<td>8:10-</td>
<td>Joint Play UE: Jenn</td>
<td>10:10-</td>
<td>Joint play Spine: Beth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Joint play UE: Jenn</td>
<td>4</td>
<td>1:10- Joint play spine: Beth</td>
</tr>
<tr>
<td></td>
<td>8:10-</td>
<td>Joint play UE: Jenn</td>
<td>10:10-</td>
<td>Joint play Spine: Beth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>8:10-</td>
<td>10:10 Review: Beth and Jenn</td>
<td>5</td>
<td>8:10- 10:10 Review: Beth and Jenn</td>
</tr>
</tbody>
</table>