University of Texas at El Paso  
College of Health Sciences  
Physical Therapy Program

PT 6304  Evidence Based Practice in Physical Therapy  Summer 2016

COURSE SYLLABUS

Credit Hours: 3

Contact Hours: 35 hours over 9 week semester
10 hours directed and independent study

Schedule:  
Mon 8:00-9:50 am and Wed 12:00-2:30  
Refer to tentative course schedule  
OOT and unavailable June 30- July 5 (Midterm visits)  
And July 12-13 (Consortium meeting)

Instructor:  
Loretta Dillon, PT, DPT  
ldillon@utep.edu  
Office Hours (Rm 312): Tuesdays 12-1 and Wed 2:30-3:30

Teaching Assistant:  
Patti Carrillo, PT, DPT  
pcarrillo@elp.rr.com

Course Description: Concepts developed in Research Methods, with a focus on incorporating scientific evidence into physical therapy practice are continued. The student is exposed to the discipline of retrieving, evaluating, and incorporating the findings of scientific literature in the conduct of clinical practice. Students will focus on the critical evaluation of new information from research findings and integration of the best research evidence into clinical practice.

Course Objectives: Upon completion of this course, the student will be able to: (7B)  
1. Describe the principles of evidence-based practice and evidence-informed practice.  
2. Demonstrate effective search strategies for the PICO question developed in PT 5105 by creating a CAT through CEBM.  
3. Demonstrate proficiency in selecting and searching relevant electronic resources.  
4. Apply evidence-based practice studies (diagnostic, prognostic, intervention, outcomes and clinical prediction rules) to patient and practice management.  
5. Evaluate outcome measurement tools for reliability and validity.  
6. Describe and explain the hierarchy of evidence for evidence-based practice.  
7. Review research design and statistical test selection for evidence-based practice.  
8. Retrieve and critically evaluate studies from rehabilitation research literature including diagnosis, prognosis, and intervention studies and systematic reviews.  
9. Critically evaluate the reliability, validity, clinical relevance, accuracy, and timeliness of any electronic published materials. (7D11)  
10. Create an evidence table that answers a clinical question related to either the Neuromuscular or Musculoskeletal System.  
11. Understand the use of health informatics in the health care environment. (7D40)
12. Demonstrate an awareness of legal and social issues involved with the use of information such as copyright infringement, plagiarism, censorship, etc. by the ability to differentiate among various types of sources and to cite these sources accurately in AMA format.

13. Demonstrate cross-curricular knowledge of EBP in an oral defense.


**Required APTA Membership:** to access online materials available to members only including PTNow

**Methods of Instruction:** Lecture, internet search and retrieval through data base access, article appraisal, case based activities, and other active learning assignments as indicated.

**Methods of Evaluation:** Quizzes, final exam, assignments, and article appraisals. No late assignments will be accepted. It is the student’s responsibility to stay on top of deadlines and manage time appropriately.

<table>
<thead>
<tr>
<th>Weekly Quizzes</th>
<th>10%</th>
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<tbody>
<tr>
<td>Critically Appraised Topic (PICO)</td>
<td>15%</td>
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<tr>
<td>Article Appraisals (5 % each)</td>
<td>20%</td>
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<tr>
<td>Worksheets and articles will be posted on blackboard. See each assignment for detail.</td>
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<tr>
<td>Evidence Table</td>
<td>10%</td>
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<tr>
<td>Research Defense</td>
<td>10%</td>
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<tr>
<td>Final Exam</td>
<td>35%</td>
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</table>

For all assignments submitted through the dropbox, FOLLOW THESE RULES:

1. Name your file YOUR LAST NAME and the name of the assignment (eg. Dillon_PICO)
2. Type your name(s) on the WORD document.
3. If the assignment is for 2 or more students, ALL NAMES belong on the file and the document.

Consequences for not following these rules will result in your assignment not being graded and earning a ZERO for the assignment. NO EXCEPTIONS.

**UTEP PHYSICAL THERAPY PROGRAM GRADING SCALE**

The following letter grade scale is used for the UTEP Physical Therapy Program:

<table>
<thead>
<tr>
<th>Letter Grade Scale</th>
<th>Numerical Grade Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100</td>
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<tr>
<td>B</td>
<td>80-89</td>
</tr>
<tr>
<td>C</td>
<td>75-79</td>
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<tr>
<td>F</td>
<td>Below 75</td>
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</tbody>
</table>

**Course Content:** refer to topic outline

Updated June 2, 2016
Course and Program Policies:
All students must come to class with a laptop prepared to conduct various internet searches and assignments. If the student does not own a laptop, one will be provided by the ILC, but the student needs to inform the instructor 24 hours prior to class time to make arrangements for a laptop to be checked out through the ILC.

If during the class time, students are found not to be engaged in the class assignment (eg on Facebook, studying for another course, etc) the student will be told to leave the class. This will result in an unexcused absence. Per the DPT Class of 2017 Handbook, “Each unexcused absence will result in a 5% decrease in the final grade for the course.”

See PT Program Handbook for all policies on exams, electronic device use, dress code, attendance, and scholastic dishonesty. Your instructors encourage you to periodically review all handbook policies, but in light of past experiences, I particularly direct you to review the policies on cheating, attendance, and the disclaimer that the syllabus is subject to change.

Attendance/Tardiness:
Attendance is expected, however, life happens. Therefore, ONE excused absence of a single class* is permitted for any reason. In order for your first absence to be excused, you must meet the expectation described further down. HOWEVER (with very rare exception [eg, documented serious illness or emergency] that will be considered on a case by case basis) there will be NO accommodations offered for missed class time. Specifically, there is NO opportunity to make up in-class quizzes, either in advance of or after the scheduled class, or provide individual tutoring for missed content. Additionally late work caused by your absence will not be accepted. You should make prior arrangements with a classmate to find out what you missed, turn in any work, and/or pick up any hand-outs. (*NOTE: Single class is defined as 2 or 2.5 hours).

In order to be excused for your first missed class, you must do the following:
- Email me at ldillon@utep.edu or call my office line, 747-8215 at least 2 hours in advance if you will not be attending class. I do not require you to give me a reason, but I expect notice in advance. A message from one of your classmates is not acceptable.

If you miss a second (or more) class for any reason, it will be considered unexcused unless it is due to documented illness or emergency. In these cases, you should email me and then arrange a meeting with me upon your return to school to discuss why you missed class. Documentation will be required for any additional absence (eg, doctor’s note documenting illness or treatment). I will notify you after our meeting and review of your documentation whether or not the absence will be considered excused or unexcused.

Missing 50% or more of a class will be considered an absence.

For each incident of an unexcused absence, 5% will be deducted from your final semester grade.
Tardiness:
I use the clock on the computer to determine when class should start. If you expect to arrive late (eg, doctor’s appointment), you should notify me in writing by email or call in at least 2 hours in advance. If you are consistently late for any reasons, I will contact you to meet with me to discuss the problem. Each subsequent incidence of tardiness may result in 1% deduction from your final semester grade.

Special Accommodations (ADA):
“If you have or suspect a disability and need accommodations, you should contact the Center for Accommodations and Support Services (CASS) at 747-5148.” You can also e-mail the office at cass@utep.edu or go by their office in Union Building East. For additional information, visit the CASS website at http://sa.utep.edu/cass/

COURSE ASSIGNMENTS AND EVALUATION OF LEARNING
All assignments in this course are team-based assignments. The Article Appraisals and Evidence Table are in teams of 3 and the PICO assignment has teams of 6-7 students. Effective communication is key to a well-functioning team. Discuss and agree upon expectations for all members including meeting dates and times and division of roles when applicable.

It is my expectation that ALL students are able to work with each team member in a respectful and professional manner. I also expect that each student reads and critically appraises the articles BEFORE meeting together as a team to discuss findings and complete the final submission.

It is every individual’s responsibility to work as a team. If expectations are not met, then the team is not effective. The entire team has the right to dismiss a team member for not meeting expectations, but there are consequences to the team as a whole. If a team member is found to be disruptive to the process, the individual can be dismissed for the one assignment and will earn a 0 for that assignment. However, the other members of the team will lose 10% of the team grade for not being able to resolve the issues. If a team member is determined to not meet expectations for 2 assignments, then the student will lose a letter grade equivalent at the end of the course. It is in everyone’s best interest to work together effectively and efficiently.

Article Appraisals: (20%)
Articles will be assigned and posted on Blackboard with the appraisal worksheet. Appraisals will be completed on diagnostic, prognostic, and intervention studies and 1 systematic review. See Blackboard for further detail.

Evidence Table (10%)
Students in assigned groups of 3 and will create an evidence table selecting one of 2 questions to perform a review of intervention literature. Expected outcomes: students will retrieve and report on relevant research to answer the stated research question. Students will complete the table free of grammatical/spelling errors, cite references in AMA format, and interpret each of the studies accurately to complete the table. A minimum of 3 references are required to answer the question and form the clinical decision. This assignment is part of the directed home study. See Blackboard for further detail.
Mini-Systematic Review (SR) Presentation/Oral Defense (10%)

This is a continuation of the Mini-SR completed in PT 6307 Cardiopulmonary Patient Management. Students are grouped in the same teams as in PT 6307. Each group will give a 5 minute presentation on their Mini-SR. This will be followed by an approximately 30 minute “oral defense” period, during which 2 faculty members will be asking questions of each group member. The students should be prepared to answer questions related to their search process, process of appraisal, and conclusions based on the 3 appraised articles that they used to answer their original PICO question. Additionally students will be expected to demonstrate knowledge of key research concepts, specifically ones that are relevant to their 3 appraised articles and to systematic reviews in general.

In preparation, you should know all elements of your appraised articles (eg, be able to explain research designs in your own words), be able to answer questions related to systematic reviews in general, and certainly be able to address any questions/issues I noted in your manuscripts – as your reviewers will have the hard copy of my review with notes. I suggest you create your own questions for each other in advance, and practice defending in front of each other.

Each group must email mini-SR manuscript and PDFs of the 3 articles to faculty evaluators by midnight on JUNE 15, 2016. Failure to meet this deadline will lead to a deduction. SCHEDULE is posted on BB.

PICO Continuation: (15%)

Teams were assigned based on the PICO question from PT 5105. The teams are as follows:

Team 1: (Knee) Sarah D, Kelsey, Bianca, George, Levi, Marcela, Lindsay
Team 2: (Cardiopulm/Random): Sarah E, La Tonya, Keith, Natalie, Bradley, Katie W, Ricardo
Team 3: (Hip/Spine): Chelsea, Stephen, Justin, Matt, Marisa, Kate R, Felicity
Team 4: (CVA/wounds): Bailey, Wyatt, Kaitlyn, Deborah, Isaac, Kiki
Team 5: (Shoulder/Foot): Lily, Audrey, Ashley, Brandon, Amanda, Luke

All students will download the CATmaker from CEBM.net to become familiar with the tool. The team will create a CAT for a mutually agreed upon PICO question based on one or more of the PICO questions of which you originally wrote. The data you enter will be from one study you retrieved that best answers your question. Be sure and read all the instructions on how to create the CAT. You will save the file as a txt file or htm and upload to BB by the due date.

Updated June 2, 2016
<table>
<thead>
<tr>
<th>Week</th>
<th>Date/Time</th>
<th>Topic/Assignments/Quizzes</th>
<th>Reading</th>
<th>Course objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>June 1 12:00-2:30</td>
<td>Pre-test (Quiz 1) over Research Methods and EBP baseline knowledge, Read all articles on BB and be ready to discuss key concepts. Review background and foreground questions. BRING LAPTOP or NOTEBOOK for electronic access for most every class period.</td>
<td>Review key terms Ch 1-3 Articles on BB CEBM.net</td>
<td>1, 3, 6, 9, 12</td>
</tr>
<tr>
<td>2</td>
<td>June 6 8:00-10:00</td>
<td>Quiz 2 (week 1 material) Questions, Theories, and Hypotheses Research Design Legal and social issues AMA format</td>
<td>Review key terms Ch 4-5</td>
<td>7, 9, 12</td>
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<td></td>
<td>June 8 12:00-2:30</td>
<td>PICO Continuation-bring hard copy of your PICO assignment from PT 5105. Instructions to be given in class.</td>
<td>Articles on BB</td>
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<td>3</td>
<td>June 13 8:00-10:00</td>
<td>Quiz 3 (week 2 material) Research Subjects, Variables, Research Validity</td>
<td>Review key terms Ch 6-8</td>
<td>7</td>
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<td></td>
<td>June 15 12:00-2:30</td>
<td>In-class work on evaluating research designs and internal/external validity If time permits, begin work on Evidence Table.</td>
<td>Articles on BB</td>
<td></td>
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<td>4</td>
<td>June 20 8:00-10:00</td>
<td>Quiz 4 (week 3 material) Evidence Table due 8:00 am Unraveling Statistical Mysteries</td>
<td>Ch 9-10 (ppts on BB) Articles on BB</td>
<td>7, 10</td>
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<td></td>
<td>June 22 12:00-2:30</td>
<td>Appraising the evidence-Diagnosis Search and retrieval and appraisal of diagnostic articles Begin work on diagnostic worksheet in assigned pairs.</td>
<td>Ch 11 (ppts on BB) Articles on BB</td>
<td>3, 4, 8, 9</td>
</tr>
<tr>
<td>5</td>
<td>June 27 8:00-10:00</td>
<td>Quiz 5 (week 4 material) Appraising the evidence-Prognostic Factors and Interventions Appraisal 1 due 8:00 AM (Diagnosis)</td>
<td>Ch 12-13 (ppts on BB) Articles on BB</td>
<td>3, 4, 8, 9</td>
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<tr>
<td>Date</td>
<td>Time</td>
<td>Event</td>
<td>Location</td>
<td>Notes</td>
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<td>June 29</td>
<td>12:00-2:30</td>
<td>Appraising the evidence-Interventions Begin work on Intervention worksheet in assigned pairs.</td>
<td>Ch 11-15 Articles on BB 4, 8</td>
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<td>6</td>
<td>NO CLASS</td>
<td>HOLIDAY</td>
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<td>July 4</td>
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<td>July 5</td>
<td>9-11:30</td>
<td>Quiz 6 (week 5 material) Appraisal 2 due July 6, noon (Interventions) PPT for Research Defense due at noon on July 6 as well. Systematic Reviews Meta-Analysis</td>
<td>Articles on BB Ch 17 (ppts on BB) 4, 8</td>
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<td>July 8</td>
<td>12:30-3:30</td>
<td>PICO TEAMS RESEARCH DEFENSE for 45 minutes. Schedule to be posted no later than July 6.</td>
<td>ALL</td>
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<td>7</td>
<td>July 11</td>
<td>8:00-10:00 Quiz 7 (week 6 material) Evidence-informed practice- Clinical Prediction Rules and Outcomes Research Begin work on Prognostic worksheet in assigned pairs if time permits</td>
<td>Articles on BB Ch 14-16 (ppts on BB) 1, 4, 5, 8</td>
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<td>July 13</td>
<td>12:00-2:30</td>
<td>Appraisal 3 Prognosis due noon CLASS TIME TO BE USED FOR CAT and/or SR Appraisal- No instructor present</td>
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<td>8</td>
<td>July 18</td>
<td>8:00-10:00 Appraisal 4 SR due 8am Biomedical Informatics Kimberly Smith, PhD, MT(ASCP) Guest Speaker, UT Health Science Center at Houston</td>
<td>Articles on BB 11, 12</td>
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<td>July 20</td>
<td>12:00-2:30</td>
<td>Quiz 8 (week 7 material) CAT due on BB noon IOM Core Competencies, APTA Registry.</td>
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<td>9</td>
<td>July 25</td>
<td>8:00-10:00 Putting it altogether -cases NO QUIZ</td>
<td>Ch 18-19 ALL</td>
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<tr>
<td>July 27</td>
<td>12:00-2:30</td>
<td>Feedback and wrap-up Review for final exam Expectations for full time clinical rotations with regard to EBP</td>
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<tr>
<td>10</td>
<td>Aug 1</td>
<td>9am-12 noon Comprehensive exam Room 234</td>
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