UNIVERSITY OF COLORADO DENVER
PHYSICAL THERAPY PROGRAM

Course Title: Evidence Based Practice  Credit Hours: 3

Course Number: DPTR 5621  Semester: Fall 2014

Primary Instructor:

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Support Staff:

Mark Manago, PT, DPT, NCS
Instructor
Course Description:
Introduction to principles of evidence-based practice and conceptual models of clinical decision making. Application of evidence-based principles to the selection of clinical tests and measures, interventions, and prognoses in physical therapy practice. Focus on developing search and critical appraisal skills to guide clinical decision making.

Course Objectives:
Upon successful completion of the course, students will be able to:

1. Discuss and justify the need for research and its impact on the physical therapy profession.
2. Compare and contrast different types of clinical reasoning.
3. Apply the ICF model to the selection of appropriate tests and measures, interventions, and prognoses for a variety of patient cases.
4. State the principles of evidence based practice and describe their application to physical therapy.
5. Reflect on challenges to evidence based physical therapy practice in our current clinical environment.
6. Formulate and revise a clinical question to guide a search of the literature.
7. Perform efficient and effective searches of the literature using common electronic databases (e.g., PubMed, PEDRO, Cochrane).
8. Assess the appropriateness of a given research study design to address a specific clinical question.
9. Critically appraise a published report by evaluating threats to construct validity, statistical conclusion validity, internal validity, and external validity.
10. Critically evaluate and apply evidence related to physical therapy tests and measures, intervention, and prognosis.
11. Define and interpret common statistical tests used in clinical research.
12. Identify formal approaches to evaluating your own clinical practice.

Throughout the course, students are expected to:
1. Recognize and display a positive attitude toward learning.
2. Behave respectfully toward peers and faculty.
3. Respond positively to questions, comments, and constructive criticism.
4. Actively participate in group discussions and assignments.
5. Provide constructive feedback to the instructor.

This course meets the following accreditation requirements:
3.8.3.1. Expressively and receptively communicates with all individuals when engaged in physical therapy research, including patients/clients, families, care givers, colleagues and other practitioners, payers, and policy makers.
3.8.3.3. Demonstrate professional behaviors in all interactions with patients/clients, families, caregivers, other health care providers and payers.
3.8.3.8. Participate in the design and implementation of decision-making guidelines.
3.8.3.10. Evaluate published studies related to physical therapy practice, research, and education.
3.8.3.11. Secure and critically evaluate information related to new and established techniques and technology, legislation, policy, and environments related to patient/client care.
3.8.3.12. Participate in scholarly activities to contribute to the body of physical therapy knowledge (e.g., case reports, collaborative research).
3.8.3.14. Formulate and implement a plan for personal and professional career development based
on self-assessment and feedback from others.
3.8.3.32. Implement an evaluation of individual or collective outcomes of patients/clients.

Course Communication

Email: Announcements of course information and other communication within this course will be sent using the e-mail address designated by the student. It is the student’s responsibility to check e-mail on a regular basis.

Non-email communication:
The Canvas format will be used for this class.

Method of Making Appointments for Office Hours: Requests for office hours should be made in advance by email.

Canvas Navigation:
Course materials can be accessed using the following tabs located on the main panel on the left side of the screen in Canvas. Note that numbered online modules will not appear on the main panel until the date posted in the course schedule below.

<table>
<thead>
<tr>
<th>Tab Name</th>
<th>Course Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>Updates on assignments, announcements, and upcoming modules</td>
</tr>
<tr>
<td>Announcements</td>
<td>Instructor announcements regarding course logistics posted as needed. Be sure to check Announcements regularly for new postings.</td>
</tr>
<tr>
<td>Syllabus</td>
<td>Course syllabus, course schedule, and instructor contact information</td>
</tr>
<tr>
<td>Modules</td>
<td>Lecture materials</td>
</tr>
<tr>
<td></td>
<td>Required supplementary readings</td>
</tr>
<tr>
<td>Assignments</td>
<td>Documents required for literature search and appraisal assignments</td>
</tr>
<tr>
<td>Grades</td>
<td>View grades on quizzes and assignments</td>
</tr>
</tbody>
</table>

Required Text(s) and readings:
No texts are required for this course. Required readings for each online module will be posted on Canvas.

**Recommended texts and readings:**


**Teaching and Assessment Methods:**

This course consists of 8 online modules, supplemented by weekly discussions and 3 lab sessions. Each online module includes visual-audio lecture material, and supplemental readings. In-class quizzes will be given during the subsequent weekly discussion. Students must attend and participate in weekly discussions to earn full participation points. Weekly modules will be posted 1-2 weeks prior to the discussion date for each quiz. Plan to spend approximately 2-3 hours to complete the lecture and required readings for each module. While enrolled in the course, you will have unlimited access to lecture and reading materials. **Be sure to thoroughly review all lecture and reading materials before beginning each quiz.**

Three, 2-hour lab sessions will be conducted on campus to allow for guided practice of search and critical appraisal skills introduced in the online modules. During these sessions, written assignments will assess students’ ability to find and apply evidence to clinical decision-making for simulated patient cases. Written assignments provided during the onsite library sessions must be submitted within 14 days of assignment. **Lab sessions will require you to bring or share a laptop during the course, so be prepared to work from your personal computer on these days.**

**Evaluation Methods:**

This course assessments include 8 module quizzes, and 3 written assignments.

Grades and grading policies:
Quizzes 1-8                       (5 points each)                      40
Written Assignments 1-3   (15 points each)                    45
Course Participation          (15 points)                             15

100 points possible

Grading Scale: The UCD Grading Scale found in the Policies and Procedures manual will be followed in this class.

<table>
<thead>
<tr>
<th>Points/Percentage</th>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>93-100</td>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>90-92</td>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>87-89</td>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>83-86</td>
<td>B</td>
<td>2.7</td>
</tr>
<tr>
<td>80-82</td>
<td>B-</td>
<td>2.3</td>
</tr>
<tr>
<td>77-79</td>
<td>C+</td>
<td>2.0</td>
</tr>
<tr>
<td>73-76</td>
<td>C</td>
<td>1.7</td>
</tr>
<tr>
<td>60-69</td>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>&lt;60</td>
<td>F</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Course Policies (PLEASE READ CAREFULLY):

Attendance

Guided, hands-on practice of search and critical appraisal skills is vital to the assimilation of online lecture material, therefore attendance is mandatory for discussions and lab sessions. Exceptions to this policy will be made only in extenuating circumstances with prior approval of the instructor. Such arrangements must be approved by the course instructor at least 2 weeks prior to each scheduled class date. If you cannot attend one or more library sessions at the scheduled times, please contact the instructor immediately.
Due Date Extensions

Extension of due dates for quizzes and assignments may be arranged only in extenuating circumstances with prior approval of the instructor. Please be aware that course material is cumulative, and failure to complete an assignment on time may hinder the ability to complete subsequent assignments.

Honor Code and Professional Behavior

Students are expected to adhere to professional and ethical standards of behavior throughout the course. Specific policies are detailed in the Student Policy and Procedures manual.

Course Schedule:

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Location</th>
<th>Topics</th>
<th>Quizzes/Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/29/14</td>
<td></td>
<td>Course orientation</td>
<td></td>
</tr>
<tr>
<td>9/5/14</td>
<td></td>
<td><strong>Module 1 Review</strong>: Introduction to clinical decision making; ICF case examples (in-class discussion)</td>
<td>Module 1 Quiz</td>
</tr>
<tr>
<td>9/23/14</td>
<td></td>
<td><strong>Module 2 Review</strong>: Introduction to evidence based practice; Basics of measurement; Statistical conclusion validity</td>
<td>Module 2 Quiz</td>
</tr>
<tr>
<td>10/3/14</td>
<td></td>
<td><strong>Module 3 Review</strong>: Construct validity; External validity</td>
<td>Module 3 Quiz</td>
</tr>
<tr>
<td>10/10/14</td>
<td></td>
<td><strong>Module 4 Review</strong>: Internal validity; Study design</td>
<td>Module 4 Quiz</td>
</tr>
<tr>
<td>10/17/14</td>
<td></td>
<td><strong>SEARCH LAB</strong>: Online resources for searching the evidence (Jones)</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Activity</td>
<td>Details</td>
</tr>
<tr>
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<td>----------------------------------------------</td>
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<tr>
<td>10/24/14</td>
<td>3-5PM</td>
<td>Module 5 Review &amp; LAB: Searching &amp; evaluating the literature on tests and measures</td>
<td>Module 5 Quiz T&amp;M Lab: Part 1 DUE</td>
</tr>
<tr>
<td>10/31/14</td>
<td>3-5PM</td>
<td>Module 6 Review &amp; LAB: Searching &amp; evaluating the literature on interventions</td>
<td>Module 6 Quiz Interv Lab: Part 1 DUE T&amp;M Lab: Part 2 DUE</td>
</tr>
<tr>
<td>11/7/14</td>
<td>3-5PM</td>
<td>Module 7 Review &amp; LAB: Searching &amp; evaluating the literature on prognosis</td>
<td>Module 7 Quiz Prognosis Lab: Part 1 DUE Interv Lab: Part 2 DUE</td>
</tr>
<tr>
<td>11/14/14</td>
<td>3-5PM</td>
<td>Module 8 Review: Sequential clinical trials &amp; single subject design; Case reports</td>
<td>Module 8 Quiz Prognosis Lab: Part 2 DUE</td>
</tr>
<tr>
<td>11/24/14</td>
<td>3-4PM</td>
<td>Course review and discussion</td>
<td></td>
</tr>
</tbody>
</table>

[M1] Update with SDSU info

[M2] Add role and contact info