PT 7241: Clinical Research for Physical Therapy

COURSE DESCRIPTION:

This course is designed to present information about the research process including: identifying research question, design the study, methods, data analysis, and communication. The essential concept and ethical issues in clinical research are also addressed. Students will complete developing research proposal for their DPT capstone project and submit to IRB before implementing the designed plan on the following semesters.

COURSE COORDINATOR: Han-Hung (Floyd) Huang, PT, PhD
Associate Professor
Office: HHS 224A
(w) 325-942-2627
Email: floyd.huang@angelo.edu

OFFICE HOURS: By appointment

COURSE LOCATION: HHS 216

MEETING HOURS: Tuesday, 10:00 am – 12:00 pm

CLOCK HOURS: 32 Lecture Hours

COURSE PREREQUISITES: Successful completion of previous DPT coursework

COURSE OBJECTIVES: At the end of this course, the students will have demonstrated mastery of the subject by being able to:

1. Describe the concept of clinical research applied to PT practice. (7D5, 7D11, 7D15)
2. Describe the ethical issues in PT research involving human subjects. (7D4, 7D8)
3. Complete the online training of Human Subjects Research Courses. (7D4, 7D8)
4. Identify PT research question for capstone project. (7D9)
5. Discriminate the features of various designs commonly seen in PT research. (7D9)
6. Describe the common statistical analysis methods applied for PT research and select appropriate statistical tests for capstone project. (7D9)
7. Develop a novel, significant and feasible research proposal for capstone project. (7D10)
8. Present research proposal to obtain constructive feedback from PT faculty and peers. (7D12)
9. Submit research proposal and informed consent to ASU IRB. (7D4, 7D10)

TEACHING METHODS/PHILOSOPHY:
- Lecture, group discussion, article reading, research proposal development and oral presentation.
- Blackboard will be used to communicate between instructor and students.

CLASS SCHEDULE: See attached.

INSTRUCTIONAL RESOURCES AND REFERENCES:

3. Guide to Physical Therapist Practice 3.0
4. Handouts, journal research articles and shared websites
GRADING/EVALUATIVE PROCEDURES:

I. Assignments (60%)
   Central objective: Developing a research proposal for capstone project and submit it to IRB

<table>
<thead>
<tr>
<th>No.</th>
<th>%</th>
<th>Content (Refer to handouts for more detail)</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20%</td>
<td>Complete human subjects research courses (CITI Program)</td>
<td>Feb. 8</td>
</tr>
<tr>
<td>2</td>
<td>10%</td>
<td>Identify the research question for capstone project</td>
<td>Mar. 1</td>
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<tr>
<td>3</td>
<td>10%</td>
<td>Design capstone research project</td>
<td>Mar. 22</td>
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<td>4</td>
<td>10%</td>
<td>Initiate capstone project paper (Introduction &amp; Methods)</td>
<td>Apr. 5</td>
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<tr>
<td>5</td>
<td>10%</td>
<td>Submit research proposal and informed consent for IRB</td>
<td>Apr. 19</td>
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</tbody>
</table>

II. Quiz- Research Design (10%)

III. Research Proposal Presentation (20%)

IV. DPT Student Research Day (10%)

The final course grade will be assigned based on the cumulative percentage of points earned throughout the course:

- A = 90%-100%
- B = 80%-89%
- C = 70%-79%
- F = 69% or less

Students must score 80% or better in total (A or B grade) in order to meet mastery and receive credit for this course. Students who receive a failing course grade are subject to dismissal from the DPT program. Exceptions may be sought by petition of the Academic Committee of the Physical Therapy Program.

ACADEMIC HONESTY:

Academic honesty policies and procedures are reinforced throughout all aspects of the professional program. Faculty and students should familiarize themselves with the Angelo State University Code of Student Conduct found in the ASU Student Handbook available on the ASU website (http://www.angelo.edu/student-handbook/). This document, in addition to the information listed below, will be utilized to identify and address academic dishonesty within the program. The Department of Physical Therapy bases student conduct on the APTA Code of Ethics, Guide for Professional Conduct and Standards of Practice (http://www.apta.org/) (Appendix 8), in addition to Professional Behaviors. Specifically, the Department of Physical Therapy aligns itself with Angelo State University procedures under the Code of Conduct located at http://www.angelo.edu/student-handbook/code-of-student-conduct/, and the Community Policies located at http://www.angelo.edu/student-handbook/community-policies/. Both of these documents are located in the Angelo State University Student Handbook http://www.angelo.edu/student-handbook/ and fall under the guidance of the Office of Student Affairs and Enrollment Management. Please see the Dept. of Physical Therapy Student Handbook for further explanation.

ATTENDANCE/TARDINESS POLICY:

Attendance and promptness to classes, meetings, and future work obligations are considered professional behaviors. As this department is preparing potential professionals in the area of physical therapy, it is part of our expectation that student presence and timeliness will be held in highest regard. Tardiness is a disruption to the instructor and fellow students. A student is considered tardy if he/she arrives for class after the instructor has begun class activities. Please see the following related to implications from excessive lateness or absences without a reasonable excuse:

a. First offense - verbal warning
b. Second offense - second verbal warning, initiation of Disciplinary Tracking Form.
c. Third offense - 1% off final course grade
d. 1% off final course grade for each additional unexcused tardy or absence

Per the student handbook, 2 or more occurrences combined or mixed will result in the initiation of a Disciplinary Tracking Form.

If a student has an unexcused absence during integrations it may lead to the removal of that student from that clinical environment. It is the responsibility of the student to contact the clinical site and give notice if they are ill, or have transportation issues.

If the student is unable to attend class, it is the student’s responsibility to either call the PT office at 942-2545 or the office of the professor of the class directly. This notification should be made prior to commencement of said class.

Continued issues with tardiness/attendance across all courses will result in disciplinary probation and will be referred to the PT faculty for consideration of options, including program dismissal.

The PT faculty is not oblivious to doctor’s appointments and other potential hazards and emergencies in daily life. Simply taking responsibility to notify the office or the professor if issues arise is considered professional behavior. Please do not rely on a classmate or other form of notification, as these have proven unreliable in years past.

**ATTENDANCE AT ALL SCHEDULED EXAMINATIONS IS MANDATORY.** Any unexcused absence from an examination will automatically result in a score of ZERO for that examination. Any student absent from examinations due to illness or injury must have a written justification from their physician. Absence from an examination for any other reason must be excused before the time of the scheduled examination or brought about by a very serious circumstance. For excused absences only, make-up examinations must be taken no later than one week after the student returns to class. Extended absences must be approved by the Program Director of Physical Therapy.

**ACCIDENT/INCIDENT REPORTING:**

Any student involved in a safety incident on ASU property or at an ASU related educational activity (e.g. accidental needle stick, fall, etc.) must immediately notify the course coordinator, clinical instructor and/or department chair. If the incident occurs after hours, all incidents must be reported to the University Police at 942-2071. A student Accident/Incident Report must be completed no matter how insignificant the incident may appear. [See Appendix 15 of the Student Handbook for the form.]

**STUDENTS WITH DISABILITIES:**

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website at www.angelo.edu/ADA. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:
Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
dallas.swafford@angelo.edu  
Houston Harte University Center, Room 112

When a student states he or she could meet the program’s technical standards with accommodation(s), the Office of Student Affairs will confirm that the stated condition qualifies as a disability under applicable laws. If the condition qualifies as a disability, the University will determine if it agrees that the student can meet the technical standards with reasonable accommodation; this includes a review of whether or not the accommodation requested is reasonable, taking into account whether or not the accommodation would jeopardize clinician/patient safety or the educational process of the student or the institution, including all course work, clinical educational experiences and internships deemed essential to graduation. Students are required to read and sign the DPT program’s technical standards (DPT Program Student Handbook Appendix I) form and to update their responses on this form if their health status changes.

A student who requires accommodation to meet the technical standards must obtain verification by the Office of Student Affairs that proper reasonable accommodation is available for the student to meet the standard. The program will not provide accommodation without such written verification.
# SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Subjects</th>
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<tbody>
<tr>
<td>Jan 15</td>
<td>Introduction to Clinical Research for PT</td>
</tr>
<tr>
<td>Jan 22</td>
<td>Ethical Issues in PT Clinical Research</td>
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<td>*Jan 29</td>
<td>Online Training- CITE Program (1)</td>
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<tr>
<td>*Feb 5</td>
<td>Online Training- CITE Program (2)</td>
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<td>Feb 12</td>
<td>Developing PT Research Question</td>
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<td>Feb 19</td>
<td>Experimental Research (1)</td>
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<tr>
<td>Feb 26</td>
<td>Experimental Research (2)</td>
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<td>Mar 5</td>
<td>Exploratory Research</td>
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<td><strong>Spring Break</strong></td>
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<td>Mar 19</td>
<td>Descriptive Research</td>
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<td>Mar 26</td>
<td>Systematic Reviews and Meta-Analysis; Quiz</td>
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<td>Apr 2</td>
<td>Data Management and Data Analysis</td>
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<td>Apr 9</td>
<td>Informed Consent and Research Proposal for IRB</td>
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<td>Apr 16</td>
<td>Student Research Proposal Presentations (1)</td>
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<tr>
<td>Apr 23</td>
<td>Student Research Proposal Presentations (2)</td>
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<td>Apr 30</td>
<td>Student Research Proposal Presentations (3)</td>
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<tr>
<td>*May 9</td>
<td>DPT Student Research Day</td>
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* Online Training
# Meeting on Thursday, 1:00 pm – 5:30 pm