

# Research Project Guidelines

# **Doctor of Physical Therapy**

Department of Exercise Science, Arnold School of Public Health

#### Introduction

Students enrolled in the Doctor of Physical Therapy Program in the Department of Exercise Science within the Arnold School of Public Health must submit an approved research project to the Program Director to satisfy part of the requirements for the DPT degree.

The student's research project must be based on a topic that has been approved by their Research Project Committee. The defense of the student's research project must be conducted, and the final document submitted to the Program Director no later than three weeks before the date on which the student expects to graduate. If a student has received clearance to sit for the NPTE licensure exam prior to graduation, the final document will need to be submitted at an earlier date identified by the Program Director. Either the student's proposal or defense needs to be presented during a DPT Seminar class.

**Triad projects are encouraged** but not required. Projects that include more or less than 3 members need approval from the research project committee and the Program Director. If the student chooses to complete the project with classmates, the project must be of sufficient breadth and depth to require significant contributions from all members. Organization and individual responsibility of each member of this partnership is the responsibility of the student members, not the research project advisor.

<u>Please note that the form and appearance of the student's research project must comply with the Research Project guidelines outlined later in this document.</u> Research Projects that do not comply with the guidelines will not be accepted by the Program Director. Questions about this policy should be directed to the Program Director.

### **Scope and Topics**

The DPT research project is intended to allow the students to demonstrate the ability to examine a physical therapy relevant question in a systematic and scholarly manner. Students are not restricted as to topic but **must align their interests with those of a core faculty member**. The research project advisor must approve the project topic. The primary goal of the research project experience is the creation of scholarly work that contributes to the body of

knowledge in physical therapy.

**Topic:** Research topics should address faculty-driven or basic science questions within the field of physical therapy. Topics must be faculty-driven (questions based on their research focus) and sponsored by a faculty advisor. Students can use a variety of research designs to fulfill their research project including but not limited to:

- <u>Research Report (most common):</u> An original research project. Included in this category are research using quantitative or qualitative methods
- <u>Case Report:</u> A report describing any element of practice not previously documented in the
  literature. Most Case Reports focus on a patient or a group of patients (case series). Issues
  addressed may include patient management, ethical dilemmas, use of equipment or
  devices, or administrative strategies. References are needed to support rationales and
  approaches.
- <u>Technical Report:</u> An original report that describes and documents the specifications or mechanical aspects of a device used by physical therapy practitioners in intervention or measurement. References should be minimal, with major emphasis on the description of the methods used to evaluate the device.
- <u>Perspective</u>: A scholarly paper expounding on a specific clinical approach to patient care (on either a theoretical or practical basis) or addressing professional issues in physical therapy, health care, and related areas.
- Manuscript: Another option is submitting a previous student/ faculty project for journal publication. The student(s) are required to update all sections of the existing paper (literature review, results, discussion) to the journal specifications. Final project completion is agreed upon between the group and the faculty mentor. Most commonly, the project will include submission of manuscript to a specific journal and one revision and re-submission based on reviewers' comments. The student(s) must account for the time to wait for reviews into their timeline which may take up to 3 months.

#### **Enrollment**

During the preparation of the research project, any student who uses University facilities or confers with faculty about their research work must be officially enrolled.

DPT students not completing the research project by the end of the  $3^{rd}$  year Fall are required to register for PHYT 888 in the subsequent semesters. One hour of PHYT 888 is required in the summer of the  $2^{nd}$  year.

If the student does not complete the research project prior to graduation, the student(s) will not graduate with their cohort; however, they will be granted one additional semester to complete the required research assignment and will be required to register for PHYT 888. Students requiring time beyond this additional semester must formally request an exception from the core faculty of the DPT program.

### **Research Project Committee**

The research project must be supervised and successfully orally proposed and defended before the research project committee. The committee is selected by the student(s) and approved by the students' research project advisor (full time UofSC faculty member (DPT or EXSC)). The committee must consist of at least two members (including the project advisor). If the project advisor is not a member of the UofSC DPT core faulty, then a core faculty member must be on the committee. Often, committees consist of three members, this could include clinicians, PhD students, and others with demonstrated expertise in the students' chosen research topic area.

### **General Formatting**

The DPT research project must be completed using a manuscript/appendix format. The research project will consist of the following main sections:

- 1. A manuscript prepared in a journal format (appropriate to the research topic)
- 2. The review of literature
- 3. Appendices containing other relevant supplemental information.

Adhere to the use of "people-first" language. A subject should not be referred to by disability or condition (e.g., "patients with stroke," not "stroke patients"), and terms that could be considered biasing or discriminatory in any way should be removed.

**Type styles:** Use 12-point Arial font. Do not use running headers or footers.

**Margins:** The document must have these uniform margins:

- 1. Left margins must be 1.5 inches throughout, including appendixes, charts, graphs, tables, etc.
- 2. Right margins must be 1.0 inch throughout.
- 3. Top margins: First pages of all chapters must have 2.0-inch margins at the top.
  - All other pages must have 1-inch margins at the top.
  - The manuscript is Chapter 1; the Literature Review is Chapter 2. In Word, use a section break option to create different margins.
- 4. Bottom margins must be 1.0 inch throughout.

**Line spacing:** The text of the document must be double-spaced. Graphs and figures can be single spaced.

**Pagination:** Use lowercase Roman numerals to number the introductory pages (title page, acknowledgements, dedication, etc.) with the title page bearing no number but included in the sequence.

**Table of contents:** This is a required component of the document, and on it should be listed all preliminary pages, chapter headings, bibliography, and appendices (if any). Arabic numerals are to be used to number the remaining pages of the text, including appendices (use section break again to change numbering type). Placement of page numbers must be consistent (bottom-center or upper-right corner) and always one-half inch from the edge of the page. (See the page arrangement guidelines in the following section of this document). Inserting a section break between these two types of page numbers allows for the change in format.

**Length:** It is *recommended* that the body of the project (introduction, methods, results, discussion, and conclusion) be no more than **4500 words** (per *Physical Therapy Journal* style). This does not include abstract, tables, figures, references, appendices, or the literature review. The literature review should be sufficient in length to support the science in the individual project.

**Paragraphs:** The first line of a new paragraph should be indented. No skipped lines or extra spaces between paragraphs. Use left justification throughout the body of the document.

**Tables and Figures:** Tables should be formatted in Word and numbered consecutively. It is *recommended* that there should be no more than six tables and figures (total) in Chapter 1. There is no limit on the number of tables and figures in Chapter 2. See *AMA's* 10<sup>th</sup> Edition of *Manual of Style* for correct table and figure formatting.

### **Timeline for Research Project**

At least one week prior to presenting the research proposal and prior to the scheduled defense, students should submit an electronic copy, approved by their research project advisor, to their research project committee. Either the research proposal *or* defense needs to be presented in PHYT 787 - Seminar & Research in Physical Therapy.

### **Document Organization**

The Program requires that the students assume full responsibility for the correctness of content and form of all copies of the research project. The student's document must be assembled in the order shown here. All sections listed must be in the final manuscript except those labeled as optional.

#### TABLE OF CONTENTS

Title Page i (small Roman numeral (i, assigned by not typed)
Dedication (optional) ii (small Roman numeral numbered consecutively)
Acknowledgements (optional) iii (small Roman numeral numbered consecutively)
Abstract
List of Tablesv (small Roman numeral numbered consecutively)
List of Figuresvi (small Roman numeral numbered consecutively)
Manuscript (Chapter 1)
References (for Manuscript)2 (Arabic numeral numbered consecutively)
Review of Literature (Chapter 2)3 (Arabic numeral numbered consecutively)
References (for Literature Review)4 (Arabic numeral numbered consecutively)
Appendix A: Title (if applicable)5 (Arabic numeral numbered consecutively)

**Title Page:** The student will need to obtain PDF signatures of the research project committee. A sample title page, showing the required information and its arrangement on the page, follows these guidelines.

**Abstract:** When submitting the original document, it must include an abstract consisting of not more than 250 words. On a separate sheet, one inch from the top of the page, center the following sequence on three consecutive, double-spaced lines:

#### **ABSTRACT**

The exact title of the research project

#### Student names

The text of your abstract should begin after 2 blank lines. The abstract may continue onto a second page if needed. The total length may not exceed 250 words.

**References:** Two bibliographies are included in the research project; one at the end of chapter 1 and another at the end of chapter 2. References should be listed in AMA (numerically) or APA style (alphabetically by authors).

#### **Submission**

One copy of the research project must be emailed as a **PDF file to the Program Director**: sharring@mailbox.sc.edu. All sections of the research project should be combined (including figures) and given the filename as follows: **lastnames\_graduationyear.pdf**, for example jones.smith\_2022.pdf

# **Research Project Checklist**

Selection/Approval of Topic
Selection of Research Project Committee
Written Research Document Emailed to Research Project Committee One Week Prior to Proposal (Lit Review, Intro, Methods including Data Analysis, Bibliography)
Research Proposal Presented
Written Research Document Emailed to Research Project Committee One Week Prior to Defense (Abstract, Intro, Methods, Results, Discussion, Conclusion, Bibliography1, Literature Review, Bibliography 2)
Research Project Defended
Edits Approved by Research Project Advisor
Final electronic Research Project Manuscript sent to the Program Director

# INTENSIVE PHYSICAL THERAPY IMPROVES GAIT FOR AN INDIVIDUAL WITH CHRONIC HEMIPARESIS POST-STROKE: A CASE REPORT

by

Student Name

Bachelor of Science Lander University, 2010

Student Name

Bachelor of Arts Clemson University, 2010

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Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Physical Therapy in

Department of Exercise Science

Arnold School of Public Health

University of South Carolina

Year of Graduation

Accepted by:

Name of Director of Research Project & PDF signature

Name of Committee Member & PDF signature

Name of Committee Member & PDF signature