

Rehabilitation Science

Degree Offered:	Ph.D.
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Program Information

Ph.D. in Rehabilitation Science

The Ph.D. in Rehabilitation Science program is an interdisciplinary program offered by [The Department of Occupational Therapy](#) and [The Department of Physical Therapy](#) at the School of Health Professions. This exciting program is designed to prepare graduates to become*:

- Academicians, scholars, scientists and researchers in education, health care, industry, and government institutions.
- Consultants to individuals, communities, and governments.

The goal of the Program is to prepare graduates to have the following skills:

- Design and implement research studies that will contribute to the knowledge base of rehabilitation science.
- Design and deliver educational courses related to rehabilitation.
- Translate innovative rehabilitation research findings into practice so as to advance the field of rehabilitation science.

* The aim of this program is to prepare candidates to become leaders in teaching and research within the field of Rehabilitation Science. However, this is not a clinical training program. Applicants planning to become occupational therapists or physical therapists should visit the following websites to pursue training in these two professions: www.uab.edu/ot or www.uab.edu/pt.

Application Procedure

Received by UAB Graduate School

LHL G03
1720 2nd Avenue South
Birmingham, Alabama 35294-0013

- Complete and submit online Graduate School application (uab.edu/graduate)
- Submit application fee payment - Domestic: \$50.00
- Request one (1) official transcript to be mailed by the issuing institution to the UAB Graduate School
- Three (3) letters of recommendation are required. Please ask the individuals from whom you requested references to submit them online via the recommendation email request they receive. Electronic submission is the preferred method. However, if your referees prefer to mail a recommendation letter, it should be mailed to the address of the department or program to which you are applying.

Minimum Requirements for Admission

- Note that each application will be reviewed by the Admission Committee to identify individuals with strong commitment and aptitude to perform research related to Rehabilitation Science,

along with strong academic preparation and professional-leadership potential.

- Undergraduate or graduate degree in occupational or physical therapy, engineering, exercise science, neuroscience, medicine, nursing, or other health related professions.
- Recommended minimum Graduate Record Exam (GRE) score of 50th percentile for all categories.
- Recommended minimum GPA 3.0/4.0 in all previous coursework
- Three strong evaluation references, with at least one from a research lab mentor, and one from an academic source.
- With the written essay, provide evidence of appropriate goals of study, professional growth and commitment to research, with special emphasis on interest in research that is being conducted at UAB.
- Interview with faculty that shows passion and commitment to research and professional growth in Rehabilitation Science.

For further information contact:

William Thompson, Ph.D.
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205-975-2788
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Typical Program

(Course requirements are listed in semester credit hours)

First Year					
First Term	Hour	Second Term	Hour	Summer Term	Hours
RHB 780	3	RHB 785	3	RHB 782	3
RHB 783	3	RHB 784	3	RHB 789	2
RHB 789	2	RHB 789	2	RHB 790	1
RHB 790	1	RHB 790	1	GRD 717	3
EPR 609	3	EPR 710	3	Qualifier Exam	
		12	12		9
Second Year					
First Term	Hour	Second Term	Hour	Summer Term	Hours
RHB 798	3	RHB 798	3	RHB 798	3
Electives	6	Electives	6	RHB 746	1
				Electives	5
				Dissertation Proposal	
		9	9		9
Third Year					
First Term	Hour	Second Term	Hour	Summer Term	Hours
RHB 799	6-9	RHB 799	6-9	RHB 799	6-9
		6-9	6-9		6-9
Fourth Year					
First Term	Hour	Second Term	Hour	Hours	
RHB 799	6-9	RHB 799	6-9	6-9	
				Dissertation Defense	
		6-9	6-9		

Total credit hours: 90-105

*The degree plan will vary by the student's academic discipline and preparation upon entry to the PhD in Rehabilitation Science Program.

A Sample of possible Elective Courses Currently Offered at UAB includes:

Requirements	Hours
Concentration Electives: These are electives in a specific disease, population, or content area of interest	
RHB 791 Rehabilitation Sciences Clinical Project	

RHB 590	Quantitative Biomechanics of Injury and Rehabilitation
NCH 760	Child Health Theories and Concepts
NCC 613	Acute & Continuing Care Pediatric Pharmacology
NTR 650	Body Composition and Energy Metabolism
OT 677	Foundations in Low Vision Rehabilitation I
Academic Writing Electives: These are electives that focus on developing writing skills for scientific publications and/or preparation	
GRD 706	Grants and Fellowships 101
GRD 708	Writing Successfully
GRD 709	Writing Fellowships
GRD 722	Writing Research for Broad Audiences
GRD 723	Writing Research for Academic Audiences
GRD 727	Writing & Reviewing Research
GRD 728	Professional Writing & Publishing
GRD 729	Writing Your Journal Article in 12 Weeks
Research Methods Electives: These are electives in a specific research methodology or study design areas of interest	
HPO 787	Empirical Methods for Health Research
HPO 692	Health Equity and Inclusion in Public Health Programs and Policies
NRM 773	Qualitative Research Methods
NUR 752	Responsible Conduct of Research: A Cross-Cultural Perspective
EPR 596	Introduction to Qualitative Methods in Educational Research
CS 681	Simulation Models
Statistical Methodology Electives: These are electives in a specific statistical or data analysis methodology	
HPO 721	Clinical Decision Making and Cost Effectiveness Analysis
EPI 710	Analysis of Case Control Studies
CS 610	Database Systems
BST 623	General Linear Models
BST 665	Survival Analysis
EPR 790	Mixed Methods Approaches in Action Research
EPR 792	Mixed Methods Approaches to Educational Research

Courses

RHB 500. Introduction to Rehabilitation Science. 3 Hours.

Encapsulating science from the level of the cell and body structure to the person, family, community and society level, rehabilitation science serves as a foundation and the body of knowledge by which individuals may develop and evaluate current and emerging approaches to enhancing enablement and minimizing disability.

RHB 575. Special Topics in Rehabilitation Science. 1-4 Hour.

Exploration of current topics in Rehabilitation Sciences.

RHB 590. Quantitative Biomechanics of Injury and Rehabilitation. 3 Hours.

Material, mechanical, electrophysiological and energetic principles of human movement. Comparison of non-impaired versus impaired systems in relation to injury/disability.

RHB 740. Teaching Practicum. 1-3 Hour.

Individually designed, directed teaching experience in focus area appropriate to student's background, needs, and goals under guidance of faculty preceptor.

Prerequisites: [RHB 780](#) [Min Grade: C] and [RHB 781](#) [Min Grade: C] and [RHB 782](#) [Min Grade: C] and [RHB 783](#) [Min Grade: C] and [RHB 784](#) [Min Grade: C]

RHB 746. Rehabilitation Science Journal Club. 1 Hour.

Student-led, facilitated discussion of current, impactful published research in rehabilitation science. Interaction with scientists and clinicians from multiple disciplines contributing to the rehabilitation science.

RHB 775. Special Topics in Rehabilitation Sciences. 1-4 Hour.

Exploration of current issues in Rehabilitation Sciences.

RHB 780. Principles of Rehabilitation Science: Movement Science. 3 Hours.

Interdisciplinary discussion of concepts, theories, principles, and research literature underlying the understanding of neural control, biomechanics, motor learning, and motor development and how purposeful and functional body movements are accomplished under a variety of health conditions and disease processes.

RHB 781. Principles of Rehabilitation Science: Exercise Science. 3 Hours.

Interdisciplinary discussion of concepts, theories, principles, and research literature underlying the understanding of cardiac and pulmonary physiology, exercise physiology, and health behaviors and how important activities are accomplished under a variety of health conditions and disease processes.

RHB 782. Principles of Rehabilitation Science: Occupation Science. 3 Hours.

Interdisciplinary discussion of concepts, theories, principles, and research literature underlying the understanding of occupation science and how work and play activities are accomplished under a variety of health conditions and disease processes.

RHB 783. Research Design/Measurement in Rehab Sci. 3 Hours.

A detailed overview of research design and methodologies used in rehabilitation science, including quantitative and qualitative methods.

RHB 784. Res Design/Measure Rehab Sc II. 3 Hours.

A detailed overview of research design and methodologies used in rehabilitation science, including quantitative and qualitative methods. A continuation of Research Design and Measurement in Rehabilitation Science I.

RHB 785. Principles of Behavior Change in Rehabilitation Science. 3 Hours.

Scientific and theoretical principles underlying health behavior change in the context of rehabilitation science; health behavior from an ecological perspective; seminal behavior change theories; key elements required for design, implementation, and analysis of rigorous health behavior change research.

RHB 789. Rehab Science Seminar. 2 Hours.

Varied discussion of rehabilitation science topics to help students explore research questions in preparation for their dissertation.

RHB 790. Rehabilitation Science Research Project. 1 Hour.

Research experience where the student rotates through a variety of clinical research areas related to Rehabilitation Science.

RHB 791. Rehabilitation Sciences Clinical Project. 1 Hour.

Working with clinicians in a variety of clinical settings, the student develops a project to help solve a Rehabilitation Science-related problem.

RHB 798. Non Dissertation Research. 1-9 Hour.

Development of research proposal.

RHB 799. Dissertation Research. 1-9 Hour.

Dissertation Research.

Prerequisites: GAC Z