



# Program Planning Guide

## Physical Therapist Assistant, Associate in Applied Science (A45620)

**Program Length:** 5 Semesters

**Program Sites:** Chatham Health Sciences Center, seated only

**Career Pathway Options:** Associate in Applied Science in Physical Therapist Assistant

The Physical Therapist Assistant curriculum prepares graduates to work in direct patient care settings under the supervision of physical therapists. Assistants work to improve or restore function by alleviation or prevention of physical impairment and perform other essential activities in a physical therapy department.

Course work includes normal human anatomy and physiology, the consequences of disease or injury, and physical therapy treatment of a variety of patient conditions affecting humans throughout the life span.

Graduates may be eligible to take the licensure examination administered by the NC Board of Physical Therapy Examiners. Employment is available in general hospitals, rehabilitation centers, extended care facilities, specialty hospitals, home health agencies, private clinics, and public-school systems.

### Preparing for the Physical Therapist Assistant Program:

Pre-physical therapist assistant students will be enrolled as General Occupation Tech-PTA-A55280PT prior to application and acceptance to the Physical Therapist Assistant program.

Students that complete the minimum requirements can submit a Limited Enrollment Program (LEP) application via their Student Success Hub. Minimum Requirements Include:

1. Completion of all health science general education courses.
2. Complete science courses with a B or better, all other courses completed with a C or better.
3. Health Sciences GPA of 3.0 for all required General Education courses listed below.
4. All courses listed below are required for graduation.

Course Number	General Education Core	Term/Planning Notes	Credits Required	Pre- / Co-Requisites
ACA 122	College Transfer Success	1st Semester	3	None
BIO 168	Human Anat. & Physiology I w/Lab	1st Semester	5	Pre-Req: ENG 002 (Need P1 Grade or better)
ENG 111	Writing and Inquiry	1st Semester	3	Pre-Req: RISE Placement
BIO 169	Human Anat. & Physiology II w/Lab	2nd Semester	3	Pre-Req: BIO 110, 111, 163, or 168
HUM Elective (Choose One)	CTE Approved Humanities Course	2nd Semester	3	Pre-Requisites may apply
PSY 150 240	General Psychology	Flexible	3	
PHY 110/110A	Conceptual Physics I/Conceptual Physics I Lab	Flexible	4	
COM/ENG Elective (Choose One)	COM Elective: COM 110, 120, or 231; ENG 112 or ENG 114	Flexible	3	* Pre-Req: ENG 111 for ENG 112 & ENG 114



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Students accepted via the Limited Enrollment Process will then complete the Physical Therapist Assistant degree (A45620) using the plan below:

Suggested Course Schedule		Class	Lab	Clinical	Credits	Notes:
<b>1st Semester (fall)</b>						
ACA 122	College Transfer Success	0	2	0	1	
BIO 168	Anatomy and Physiology I	3	3	0	4	
ENG 111	Writing and Inquiry	3	0	0	3	
PTA 110	Intro to Physical Therapy	2	3	0	3	
PTA 130	Physical Therapy Proc I	1	6	0	3	
PTA 170	Pathophysiology	3	0	0	3	
		12	14	0	17	
<b>2nd Semester (spring)</b>						
BIO 169	Anatomy and Physiology II	3	3	0	4	
PHY 110	Conceptual Physics	3	0	0	3	
PHY 110A	Conceptual Physics Lab	0	2	0	1	
PTA 120	Functional Anatomy	1	6	0	3	
PTA 140	Therapeutic Exercise	2	6	0	4	
PTA 150	Physical Therapy Proc II	1	6	0	3	
		10	23	0	18	
<b>3rd Semester (summer)</b>						
PSY 150	General Psychology	3	0	0	3	
PTA 160	Physical Therapy Proc III	2	3	0	3	
PTA 212	Health Care/Resources	2	0	0	2	
PTA 222	Professional Interactions	2	0	0	2	
		9	3	0	10	
<b>4th Semester (fall)</b>						
Elective	Communications Elective	3	0	0	3	
PTA 240	Physical Therapy Proc IV	3	6	0	5	First 8-week class
PTA 252	Geriatrics for the PTA	2	0	0	2	First 8-week class
PTA 254	Pediatrics for the PTA	0	3	0	1	First 8-week class
PTA 180	PTA Clinical Ed Intro	0	0	9	3	Second 8-week class



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PTA 270	PTA Topics	1	0	0	1	Second 8-week class
		9	9	9	15	
<b>5th Semester (spring)</b>						
Elective	Humanities/Fine Arts Elective	3	0	0	3	
PTA 260AB	Adv PTA Clinical Ed	0	0	15	5	First 8-week class
PTA 260BB	Adv PTA Clinical Ed	0	0	15	5	Second 8-week class
		3	0	30	13	

**Communications Elective Options:** (Refer to college catalog for course details.)

**Humanities/Fine Arts Elective Options:** (Refer to college catalog for course details.)

## Course Descriptions

### **ACA 122 College Transfer Success**

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college policies and culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

### **BIO 168 Anatomy and Physiology I**

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA/ICAA as a premajor and/or elective course requirement.

### **BIO 169 Anatomy and Physiology II**

*Prerequisite: Take BIO 168*

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA/ICAA as a premajor and/or elective course requirement.

### **ENG 111 Writing and Inquiry**

*Corequisite ENG 011*

*Prerequisites: ENG 002 P1 grade and ENG 011*

This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved for transfer under the CAA and ICAA as a universal general education course in English Composition.

### **PHY 110 Conceptual Physics**

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. This course has been approved for transfer under the CAA/ICAA as a general education course in Natural Science.

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**PHY 110A      Conceptual Physics Lab***Corequisite: Take PHY 110*

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. This course has been approved for transfer under the CAA/ICAA as a general education course in Natural Science.

**PSY 150      General Psychology**

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA/ICAA as a general education course in Social/Behavioral Sciences.

**PTA 110      Intro to Physical Therapy**

This course introduces the field of physical therapy including the history and standards of practice for the physical therapist assistant and basic treatment techniques. Emphasis is placed on ethical and legal considerations, universal precautions, vital signs, documentation, basic patient preparation and treatment skills, and architectural barrier screening. Upon completion, students should be able to explain the role of the physical therapist assistant and demonstrate competence in basic techniques of patient care.

**PTA 120      Functional Anatomy***Corequisite: Take PTA 140*

This course provides an organized study of anatomy and kinesiology. Emphasis is placed on the integration of structure and function of the skeletal, articular, muscular, nervous, and circulatory systems to include gait analysis. Upon completion, students should be able to describe the components and demonstrate function of these systems as applied to physical therapy.

**PTA 130      Physical Therapy Procedures I***Corequisite: Take PTA 110*

This course includes concepts of injury and repair and documentation methods. Emphasis is placed on physiological effects, indications, contraindications, and skilled applications of selected therapeutic modalities. Upon completion, students should be able to safely, correctly, and effectively apply the emphasized techniques and procedures with understanding of correct documentation.

**PTA 140      Therapeutic Exercise***Corequisite: Take PTA 120*

This course covers muscle physiology, exercise concepts, testing, and applications to the spine and extremities. Topics include strength, endurance, flexibility, and exercise protocols and progressions. Upon completion, students should be able to demonstrate skill in applying therapeutic exercise principles for non-neurological conditions in a safe and appropriate manner.

**PTA 150      Physical Therapy Procedures II***Prerequisite: Take PTA 130*

This course is designed to include the theory and practice of additional therapeutic interventions. Topics include but are not limited to electrotherapy, burn and wound care, biofeedback, and selected data collection methods. Upon completion, students should be able to apply these modalities and treatment techniques effectively and safely and demonstrate knowledge of physiological principles involved.

**PTA 160      Physical Therapy Procedures III***Prerequisite: Take PTA 150*

This course introduces treatment and measurement techniques and discusses treatment programs for selected neuromusculoskeletal dysfunction and injuries. Topics include soft tissue and joint dysfunction, selected assessment techniques, and various exercise programs. Upon completion, students should be able to demonstrate the application of selected data collection methods and functional interventions.

**PTA 170      Pathophysiology**

This course is a survey of basic pathology with emphasis on conditions most frequently observed and treated in physical therapy. Topics include etiology, pathology, manifestation, treatment, and prognosis. Upon completion, students should be able to explain repair processes, categorize diseases, define pathology, identify organ/body systems involved, and discuss treatment and prognosis.

**PTA 180            PTA Clinical Education Introduction**

This course introduces the physical therapy clinic in planned learning experiences and practice under supervision. Emphasis is placed on reinforcement of learned skills in direct patient care and communication. Upon completion, students should be able to demonstrate satisfactory performance in learned patient care skills, communication activities, and professional behaviors.

**PTA 212            Health Care/Resources**

This course provides an overview of various aspects of healthcare delivery systems and the interrelationships of healthcare team members. Topics include health agencies and their functions, healthcare team member roles, management, and other healthcare issues. Upon completion, students should be able to discuss the functions of health organizations and team members and aspects of health care affecting physical therapy delivery.

**PTA 222            Professional Interactions**

This course is designed to assist in the development of effective interpersonal skills in the physical therapist assistant setting. Topics include reactions to disability, the grieving process, methods of communication, motivation, health promotion, disease prevention, and aging. Upon completion, students should be able to discuss and demonstrate methods for achieving effective interaction with patients, families, the public, and other healthcare providers.

**PTA 240            Physical Therapy Procedures IV**

This course covers normal development, adult and pediatric/CNS dysfunction, spinal cord injuries, amputee rehabilitation techniques, and cardiopulmonary rehabilitation. Topics include neurology review, selected rehabilitation techniques, ADL and functional training, prosthetic and orthotic training, and environmental access. Upon completion, students should be able to demonstrate safe and correct application of selected rehabilitation techniques for neurological dysfunction, cardiopulmonary conditions, and amputations.

**PTA 252            Geriatrics for the PTA**

This course is designed to provide more in-depth knowledge of physical therapy care for the geriatric individual. Topics include health promotion, wellness programs, and medical problems specific to the elderly. Upon completion, students should be able to discuss and describe special problems and programs for the elderly.

**PTA 254            Pediatrics for the PTA**

This course provides an in-depth study of pediatric dysfunction and rehabilitation techniques. Topics include severe and profound attention deficit disorder, sensory integration, and rehabilitation in the school setting. Upon completion, students should be able to discuss selected pediatric dysfunctions and demonstrate specialized rehabilitation techniques.

**PTA 260            Advanced PTA Clinical Education**

Prerequisite: Take PTA 180

This course provides full-time clinical affiliations for planned learning experiences and practice under supervision. Emphasis is placed on reinforcement of learned skills in direct patient care, communications, and professional behaviors. Upon completion, students should be able to demonstrate satisfactory performance as an entry-level physical therapist assistant and as a member of the physical therapy team.

**PTA 270            PTA Topics**

This course covers the physical therapist assistant profession in preparation for the state licensure exam. Topics include developing time management skills and practicing for the competence examinations. Upon completion, students should be able to identify individual academic strengths and weaknesses and utilize this information to continue self-study for the licensure exam.

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**ACA 122 College Transfer Success 0-2-0-1**

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college policies and culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

**BIO 168 Anatomy and Physiology I 3-3-0-4**

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA/ICAA as a premajor and/or elective course requirement.

**BIO 169 Anatomy and Physiology II 3-3-0-4**

*Prerequisite: Take BIO 168*

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA/ICAA as a premajor and/or elective course requirement.

**ENG 111 Writing and Inquiry 3-0-0-3**

*Corequisite ENG 011*

*Prerequisites: ENG 002 P1 grade and ENG 011*

This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved for transfer under the CAA and ICAA as a universal general education course in English Composition.

**PHY 110 Conceptual Physics 3-0-0-3**

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. This course has been approved for transfer under the CAA/ICAA as a general education course in Natural Science.

**PHY 110A Conceptual Physics Lab 0-2-0-1**

*Corequisite: Take PHY 110*

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. This course has been approved for transfer under the CAA/ICAA as a general education course in Natural Science.

**PSY 150 General Psychology 3-0-3**

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA/ICAA as a general education course in Social/Behavioral Sciences.



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**PTA 110 Intro to Physical Therapy 2-3-0-3**

This course introduces the field of physical therapy including the history and standards of practice for the physical therapist assistant and basic treatment techniques. Emphasis is placed on ethical and legal considerations, universal precautions, vital signs, documentation, basic patient preparation and treatment skills, and architectural barrier screening. Upon completion, students should be able to explain the role of the physical therapist assistant and demonstrate competence in basic techniques of patient care.

**PTA 120 Functional Anatomy 1-6-0-3**

*Corequisite: Take PTA 140*

This course provides an organized study of anatomy and kinesiology. Emphasis is placed on the integration of structure and function of the skeletal, articular, muscular, nervous, and circulatory systems to include gait analysis. Upon completion, students should be able to describe the components and demonstrate function of these systems as applied to physical therapy.

**PTA 130 Physical Therapy Procedures I 1-6-0-3**

*Corequisite: Take PTA 110*

This course includes concepts of injury and repair and documentation methods. Emphasis is placed on physiological effects, indications, contraindications, and skilled applications of selected therapeutic modalities. Upon completion, students should be able to safely, correctly, and effectively apply the emphasized techniques and procedures with understanding of correct documentation.

**PTA 140 Therapeutic Exercise 2-6-0-4**

*Corequisite: Take PTA 120*

This course covers muscle physiology, exercise concepts, testing, and applications to the spine and extremities. Topics include strength, endurance, flexibility, and exercise protocols and progressions. Upon completion, students should be able to demonstrate skill in applying therapeutic exercise principles for non-neurological conditions in a safe and appropriate manner.

**PTA 150 Physical Therapy Procedures II 1-6-0-3**

*Prerequisite: Take PTA 130*

This course is designed to include the theory and practice of additional therapeutic interventions. Topics include but are not limited to electrotherapy, burn and wound care, biofeedback, and selected data collection methods. Upon completion, students should be able to apply these modalities and treatment techniques effectively and safely and demonstrate knowledge of physiological principles involved.

**PTA 160 Physical Therapy Procedures III 2-3-0-3**

*Prerequisite: Take PTA 150*

This course introduces treatment and measurement techniques and discusses treatment programs for selected neuromusculoskeletal dysfunction and injuries. Topics include soft tissue and joint dysfunction, selected assessment techniques, and various exercise programs. Upon completion, students should be able to demonstrate the application of selected data collection methods and functional interventions.

**PTA 170 Pathophysiology 3-0-0-3**

This course is a survey of basic pathology with emphasis on conditions most frequently observed and treated in physical therapy. Topics include etiology, pathology, manifestation, treatment, and prognosis. Upon completion, students should be able to explain repair processes, categorize diseases, define pathology, identify organ/body systems involved, and discuss treatment and prognosis.

**PTA 180 PTA Clinical Education Introduction 0-0-9-3**

This course introduces the physical therapy clinic in planned learning experiences and practice under supervision. Emphasis is placed on reinforcement of learned skills in direct patient care and communication. Upon completion, students should be able to demonstrate satisfactory performance in learned patient care skills, communication activities, and professional behaviors.



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**PTA 212 Health Care/Resources 2-0-0-2**

This course provides an overview of various aspects of health care delivery systems and the interrelationships of health care team members. Topics include health agencies and their functions, health care team member roles, management, and other health care issues. Upon completion, students should be able to discuss the functions of health organizations and team members and aspects of health care affecting physical therapy delivery.

**PTA 222 Professional Interactions 2-0-0-2**

This course is designed to assist in the development of effective interpersonal skills in the physical therapist assistant setting. Topics include reactions to disability, the grieving process, methods of communication, motivation, health promotion, disease prevention, and aging. Upon completion, students should be able to discuss and demonstrate methods for achieving effective interaction with patients, families, the public, and other health care providers.

**PTA 240 Physical Therapy Procedures IV 3-6-0-5**

This course covers normal development, adult and pediatric/CNS dysfunction, spinal cord injuries, amputee rehabilitation techniques, and cardiopulmonary rehabilitation. Topics include neurology review, selected rehabilitation techniques, ADL and functional training, prosthetic and orthotic training, and environmental access. Upon completion, students should be able to demonstrate safe and correct application of selected rehabilitation techniques for neurological dysfunction, cardiopulmonary conditions, and amputations.

**PTA 252 Geriatrics for the PTA 2-0-0-2**

This course is designed to provide more in-depth knowledge of physical therapy care for the geriatric individual. Topics include health promotion, wellness programs, and medical problems specific to the elderly. Upon completion, students should be able to discuss and describe special problems and programs for the elderly.

**PTA 254 Pediatrics for the PTA 0-3-0-1**

This course provides an in-depth study of pediatric dysfunction and rehabilitation techniques. Topics include severe and profound attention deficit disorder, sensory integration, and rehabilitation in the school setting. Upon completion, students should be able to discuss selected pediatric dysfunctions and demonstrate specialized rehabilitation techniques.

**PTA 260 Advanced PTA Clinical Education 0-0-30-10**

*Prerequisite: Take PTA 180*

This course provides full-time clinical affiliations for planned learning experiences and practice under supervision. Emphasis is placed on reinforcement of learned skills in direct patient care, communications, and professional behaviors. Upon completion, students should be able to demonstrate satisfactory performance as an entry-level physical therapist assistant and as a member of the physical therapy team.

**PTA 270 PTA Topics 1-0-0-1**

This course covers the physical therapist assistant profession in preparation for the state licensure exam. Topics include developing time management skills and practicing for the competence examinations. Upon completion, students should be able to identify individual academic strengths and weaknesses and utilize this information to continue self-study for the licensure exam.