

Piedmont Technical College

New Program Proposal

For

Associate Degree in Health Science

Major in Physical Therapy Assistant

October 2007

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Dr. Lex Walters  
President

## Classification

<b>Name of Proposed Program:</b>	Physical Therapy Assistant
<b>Academic Unit Involved:</b>	Health Science
<b>Designation, type and level of degree:</b>	Associate Degree in Health Science Major in Physical Therapy Assistant
<b>Proposed Date of Implementation:</b>	Fall 2008
<b>CIP Code:</b>	510806
<b>Identification of Program:</b>	New
<b>Program Location:</b>	Piedmont Technical College Lex Walters Campus

## **Justification**

### **Purposes and Objectives**

Piedmont Technical College's (PTC) mission is to respond to academic, training, and public service needs through excellence in teaching and educational services. PTC contributes to the economic growth and development of the largest geographical region of the technical college system: Abbeville, Edgefield, Greenwood, Laurens, McCormick, Newberry, and Saluda counties. In support of this mission, PTC proposes to develop and implement an Associate Degree in Health Science with a major in Physical Therapy Assistant (PTA) to assist in meeting the needs of the college's service area.

In the seven-county service area, there are five hospitals, twelve rehabilitative agencies, nine long-term/residential care facilities, three home health care agencies, two sports medicine facilities, and one rehabilitative hospital that is scheduled to open in 2007. All of the identified agencies employ PTA's. A survey has been completed, and there is two fold support for clinical affiliation and graduate employment.

Graduates of the PTA program should be able to do the following:

- Assist in designing and carrying out exercise programs to build endurance, coordination, and balance
- Teach patients/clients transfer techniques
- Provide gait training instruction to patients/clients
- Utilize various modalities that will provide relief of pain and increase freedom of movement
- Use therapeutic massage to relieve pain and increase circulation to injured or sore muscles
- Promote patient/client education
- Demonstrate documentation proficiency

### **Need for Program**

The US Department of Labor, Bureau of Labor Statistics, projects that employment of PTA's "is expected to grow much faster than the average for all occupations through the year 2014." In 2004, there were 59,000 PTA's in the United States. By the year 2014, it is anticipated that there will be a need for 85,000 PTA's. According to this same source, this can be attributed to the "growing elderly population who is particularly vulnerable to chronic and debilitating conditions that require therapeutic services. The large baby-boom generation is entering the prime age for heart

attacks and strokes, further increasing the demand for cardiovascular and physical rehabilitation.” In addition to the native baby boomers, the geographical area served by PTC is attracting a large retiree population which will contribute to increased demands for physical therapy treatment.

Several health care entities have informed the college’s staff that they are limited in delivery of care in a timely manner due to the lack of qualified PTA’s. The providers in the college’s service area have requested that a program be developed to assist in meeting the need for qualified PTA employees.

In response to the provider’s request, PTC conducted a needs assessment which indicated there are approximately thirty-two potential PTA employers of varying sizes. Of the 21 survey respondents, 17 anticipate employing additional PTA’s within the next three years. Specifically, respondents anticipate approximately sixty combined new and replacement full-time positions and thirty-three part-time positions within the next three years (2008-2011). The full-time entry-level average salary is expected to be \$35,140, and part-time hourly rate will range from \$17 - \$19 per hour. This is consistent with the US Department of Labor 2004 data which reports a median salary for PTA’s of \$37,890.

Currently, PTC has linkages through a one-plus-one PTA program agreement with Greenville Technical College (GTC). The existing one-plus-one agreement ensures that only five students will be accepted into Phase II. As noted above, the college’s service area has experienced an influx of retirees. This growth has contributed to the increased need for health care facilities, especially those that provide physical therapy. As a result, the current articulation agreement that PTC has with GTC is no longer meeting the needs of the local service area.

### **Centrality to College Mission**

PTC’s mission is to support the needs of area employers by educating and graduating well-trained, professional, and knowledgeable employees. Carrying out this mission serves the 251,847 citizens of the service area by providing them with practical, affordable access to high-quality educational opportunities leading to long-term, productive employment. The creation of a PTA program to prepare competent and professional employees for entry-level PTA positions fits well within the scope of the college’s mission.

### **Relationship to Other College Programs**

Through the Health Science, Biological and Chemical Division, PTC offers associate degree and diploma programs in five health science related fields: Pharmacy Technology, Respiratory Care Technology, Radiologic Technology, Medical Assisting Technology, and Surgical Technology. Certificates are offered in Massage Therapy, Medical Coding and Billing, Patient Care Technology, Phlebotomy, and Veterinary Technology. The proposed PTA program will be under the umbrella of the Health

Science, Biological and Chemical Science Division. All of the general education courses required for the proposed program are currently in place at the college. PTC will add PTA courses to the local catalog.

### **Relationship to External Programs**

Five technical colleges across the state, Midlands Technical College (MTC), Trident Technical College (TTC), GTC, Horry-Georgetown Technical College (HGTC) and Technical College of the Low Country (TCL) currently offer an Associate Degree in Health Science with a major in PTA. According to the most recent program evaluation report, the PTA programs at MTC, TTC, and GTC are in good standing. The PTA programs at HGTC and TCL were recently approved and are not subject to the program evaluation productivity standards at this time. All of these programs are designed to prepare graduates for success on the national licensure exam. GTC also offers the PTA program through one-plus-one articulation at Aiken Technical College (ATC) and Florence-Darlington Technical College (FDTC).

## **Enrollment**

### **Admissions Criteria**

The PTA program admission criteria will follow that of other associate degree programs in the Health Science division. Student candidates should meet the following criteria:

- High school diploma or equivalent
- Appropriate placement scores on COMPASS
- Completion of ENG 101, BIO 210, PSY 201, and MAT 102 with a minimum 2.0 GPA
- Completion of high school biology, chemistry, physics and computer science highly recommended
- Demonstrated computer competency
- Completion of a criminal background check and drug screening

### **Projected Total Student Enrollment**

The college projects an enrollment of 24 students in the first semester of the proposed PTA program. This number is based on several factors including the needs survey, number of participating clinical affiliates, faculty/student ratio, physical facilities, and the number of students who express an interest in the Phase I track.

An overall attrition rate of 30% is anticipated for first-year students. This estimate is based on the average attrition rate of the three technical colleges – GTC, TTC, and MTC – that are currently graduating PTA's. Students who successfully complete the first year are expected to complete the program. Students that fail to maintain a 2.0 GPA,

transfer to other academic programs or institutions, or experience personal problems will contribute to the anticipated attrition rate.

Shown below are credit hours per semester and the projected student enrollment. The credit hours are multiplied by the projected headcount.

**Projected Total Enrollment**

	Fall		Spring		Summer	
	Headcount	Credit Hours (16)	Headcount	Credit Hours (16)	Headcount	Credit Hours (10)
2008-09	24	384	19	304	17	170
2009-10	38	608	36	576	34	340
2010-11	41	656	38	608	36	360

**Three-Year New Student Enrollment Projections**

Estimated Additional Enrollment

	Fall		Spring		Summer	
	Headcount	Credit Hours (14)	Headcount	Credit Hours (12)	Headcount	Credit Hours (10)
2008-09	16	224	15	180	14	140
2009-10	24+14=38	532	22+14=36	432	20+14=34	340
2010-11	24+17=41	574	21+17=38	456	19+17=36	360

**Curriculum**

**Proposed Curriculum Configuration**

All courses in the PTA display are currently in the SCTCS Statewide Catalog of Approved Courses. Each of the seventeen PTH courses listed below indicated with an asterisk (\*), will be added to the local catalog. A total of 78 credit hours and a minimum 2.0 GPA will be required for graduation from the proposed program.

The PTA curriculum will include elements of general education, including basic sciences that include biological, physical, physiological, and anatomical principles, and applied physical therapy science. The course work will be designed to prepare the student to think independently, to clarify values, to understand fundamental theory, and to develop critical thinking and communication skills, which will lead to success on the national examination.

## Physical Therapy Assistant

First Semester		
BIO 210	Anatomy and Physiology I	3-3-4
ENG 101	English Composition I	3-0-3
PTH 101*	Physical Therapy Professional Preparation	2-0-2
PSY 201	General Psychology	3-0-3
AHS 102	Medical Terminology	3-0-3
AHS 106	Cardiopulmonary Resuscitation	1-0-1
	<b>TOTAL</b>	<b>15-3-16</b>
Second Semester		
BIO 211	Anatomy and Physiology II	3-3-4
ENG 102	English Composition II	3-0-3
PTH 101 *	Physical Therapy Professional Preparation	2-0-2
PTH 202*	Physical Therapy Modalities	3-3-4
MAT 102	Intermediate Algebra	3-0-3
	<b>TOTAL</b>	<b>14-6-16</b>
Third Semester (Summer)		
PTH 205*	Physical Therapy Functional Anatomy	3-3-4
PTH 252*	Clinical Practice	0-6-2
PTH 221*	Pathology I	2-0-2
PTH 206*	Therapeutic Procedures	1-3-2
	<b>TOTAL</b>	<b>6-12-10</b>
Fourth Semester		
PTH 222*	Pathology II	2-0-2
PTH 226*	Therapeutic Exercise	2-3-3
PTH 244*	Rehabilitation	3-3-4
PTH 253*	Clinical Practice II	2-9-5
	<b>TOTAL</b>	<b>9-15-14</b>
Fifth Semester		
PTH 225*	Electrotherapy	1-3-2
PTH 266*	Physical Therapy Practicum I	2-12-6
PTH 242*	Orthopedic Management	3-3-4
	<b>TOTAL</b>	<b>6-18-12</b>
Sixth Semester (Summer)		
PTH 276*	Physical Therapy Practicum II	0-18-6
PTH 275*	Advanced Professional Preparation	1-0-1
PTH 270*	Special Topics in Physical Therapy	3-0-3
	<b>TOTAL</b>	<b>4-18-10</b>
	<b>TOTAL</b>	<b>54-72-78</b>

### Clinical Affiliations

Sixty-five percent of those solicited responded to the Needs Survey. Each of the twenty-one respondents indicated a willingness to serve as a clinical site for the program.

## Faculty

### Rank and Academic Qualifications

Following is a list of the faculty requirements and credentials to support the proposed program.

<b>List Staff by Rank (e.g. Professor #1, Professor #2, Associate Professor #1, etc.)</b>	<b>Highest Degree Earned</b>	<b>Field of Study</b>	<b>Teaching in Field (yes / no)</b>
Program Coordinator / Instructor	Masters	Physical Therapy	Yes
Instructor	Baccalaureate	Physical Therapy Assistant	Yes

### Qualifications of New Faculty and Staff

PTC has established faculty qualifications and credentials according to accreditation criteria from the Commission on Accreditation on Physical Therapy Education (CAPTE). The college will employ one full-time faculty member who will be identified as Program Coordinator. In addition to the day-to-day operation of the PTA program, the Program Coordinator will be responsible for instruction, student advisement and course development. The Program Coordinator will hold a Master's degree and appropriate Physical Therapist credentials. The second faculty member will be baccalaureate prepared and credentialed as a PTA. First year salaries are estimated to be \$140,500 total, with 3% increases thereafter.

### Proposed Changes in Assignment of Current Employees

The PTA program will be part of the Health Science, Biological and Chemical Division. There are no anticipated changes in assignments of current administration or staff.

### Institution Plans for Faculty Professional Development

The college's plan for faculty development includes the following:

- Requirement for new faculty to attend a series of in-house new faculty in-service programs. Each participant is required to develop a portfolio specific to their discipline.
- Financial support to attend conferences, seminars, and workshops related to physical therapy.
- Multiple in-house instructional development workshops/sessions on topics such as active learning, student assessment, diversity and technological teaching advancements (i.e. WebCT, PEN, etc.) These are presented on specific in-service days.

- The opportunity to take one PTC credit course per semester at no charge to the employee.
- Financial support from the PTC Foundation for courses taken outside of the institution that lead to professional advancement. This is applicable to professional CEU requirements.

### **Institutional Definition of Full-Time Equivalent (FTE) Faculty Member**

For faculty in the Health Science, Biological and Chemical Division, PTC defines a FTE faculty member as an instructor who teaches 24 contact hours per semester. The contact hour requirement for a program coordinator is reduced to 20. An FTE student is one who is enrolled for 15 semester hours.

### **Headcount and FTE of Faculty, Administration, and Staff**

There will be no new administrative or support staff required. The Dean of the Health Science, Biological and Chemical Division will assume administrative responsibilities for the proposed program. Instructional support will be the responsibility of the Health Science, Biological and Chemical Division Administrative Specialist. On an average, the increased responsibilities of administration and staff are estimated not to exceed 10% of an FTE.

<b>UNIT ADMINISTRATION / FACULTY / STAFF SUPPORT</b>						
<b>YEAR</b>	<b>NEW</b>		<b>EXISTING</b>		<b>TOTAL</b>	
	<b>Headcount</b>	<b>FTE</b>	<b>Headcount</b>	<b>FTE</b>	<b>Headcount</b>	<b>FTE</b>
<b>Administration</b>						
<b>2008-2009</b>			<b>1</b>	<b>.10</b>	<b>1</b>	<b>.10</b>
<b>2009-2010</b>			<b>1</b>	<b>.10</b>	<b>1</b>	<b>.10</b>
<b>2010-2011</b>			<b>1</b>	<b>.10</b>	<b>1</b>	<b>.10</b>
<b>Faculty</b>						
<b>2008-2009</b>	<b>2</b>	<b>1.5</b>			<b>2</b>	<b>1.5</b>
<b>2009-2010</b>	<b>2</b>	<b>1.5</b>			<b>2</b>	<b>1.5</b>
<b>2010-2011</b>	<b>2</b>	<b>1.5</b>			<b>2</b>	<b>1.5</b>
<b>Staff</b>						
<b>2008-2009</b>			<b>1</b>	<b>.10</b>	<b>1</b>	<b>.10</b>
<b>2009-2010</b>			<b>1</b>	<b>.10</b>	<b>1</b>	<b>.10</b>
<b>2010-2011</b>			<b>1</b>	<b>.10</b>	<b>1</b>	<b>.10</b>

## Library

### Library Overview

The staff of the PTC Library selects, purchases, processes, catalogs, maintains and disseminates information resources and provides library instruction to students, faculty, and staff on the Lex Walters Campus in Greenwood, the college's six outlying county centers, and online. They also maintain an extensive library Web site that offers 24-hour information about services and materials, access to the library catalog and online resources, and instructional materials.

The main library is a 20,000 square-foot facility that houses most of the college's physical resource collection, a 30-computer lab, and comfortable space for study, research and reading. Visitors will also find eight computers designed for library research, private study carrels, a group study room, a conference room, video viewing rooms, and a library classroom equipped with "smart" technology.

### Comparison of Current Holdings to Peer Institutions

As recommended by the Association of College and Research Libraries (ACRL) and the American Library Association (ALA), PTC has collected data for libraries at peer institutions in South Carolina. Of the institutions listed, GTC, MTC, TCLC, and TTC offer an Associate Degree for PTA.

The comparison of institutions with PTA programs is shown below.

	Group Median	Piedmont
Books and other print materials	38,173	29,675
AV Material	1,980	2,938
Current Serial Subscriptions	286	323
Expenditures per FTE	\$140.71	\$109.74
12 Month Total FTE	2,901	2,795

### Physical Therapy Assistant Resources

Within the existing collection, library users will already find many resources related to the study and practice of physical therapy. The library collection includes a variety of print, audiovisual, and computer media as well as access to a wide array of Web-based resources. Visitors have access to a Web-based library catalog when searching for books, audiovisual items, or periodical titles.

The library staff has identified specific resources among the 32,436 books and AV materials, and 323 current journal and serial subscriptions pertaining to physical therapy.

## **Books and Audiovisual Resources**

The library offers many books and other resources that deal with the basic medical sciences that would be valuable to PTA students. Additionally, students and faculty are able to request books from any university or college library in South Carolina, including those that offer degrees relating to studies in PTA. These books arrive within two days at no expense to the requestor. A second inter-library loan program allows students and faculty to request books or articles from other libraries nationwide.

## **Electronic Books/ Periodical Literature**

Within the 46,000+ searchable, full-text books owned by the library, students and faculty will find 18 titles relating specifically to physical therapy. All of these titles have been published since 1994, and 67% were published within the last five years. Through the various electronic databases offered by the library, students and faculty can access many citations and/or full-text articles that originate from the journals and reference sources (many peer-reviewed) pertaining to PTA. These titles/resources are accessible via the Internet.

## **Three-Year Acquisitions Plan with Estimates**

Further collection development efforts to support the two-year degree in PTA will begin as soon as the program is approved. In addition to faculty recommendations, librarians will use collection development resources such as *Library Journal*, *Choice Reviews*, *Best Books for Academic Libraries*, trade association publications, and holdings of other peer institutions with similar programs to select resources.

The table below shows library funds that have been earmarked for the PTA collection over the next three years. Amounts may be adjusted as the program grows and/or as the library's budget allowance changes.

	<b>2008-2009</b>	<b>2009-2010</b>	<b>2010-2011</b>	<b>Totals</b>
<b>Books 10@ \$30 each</b>	<b>\$300</b>	<b>\$300</b>	<b>\$300</b>	<b>\$900</b>
<b>Serials 2 @ \$50 each with annual renewals</b>	<b>\$100</b>	<b>\$100</b>	<b>\$100</b>	<b>\$300</b>
<b>AV Materials 6 @ \$50 each</b>	<b>\$300</b>	<b>\$300</b>	<b>\$300</b>	<b>\$900</b>
<b>Yearly Totals</b>	<b>\$700</b>	<b>\$700</b>	<b>\$700</b>	<b>\$2,100</b>

## **Physical Plant**

### **Physical Plant Requirements**

An existing space of 1890 square feet will be renovated at an estimated cost of \$26,220 prior to the acceptance of the first class. The area will include classroom space, a dedicated lab, storage, offices and dressing/locker rooms. The area will meet facility requirements as described in the Commission on Accreditation in Physical Therapy Education (CAPTE) Rules of Practice and Procedure Accreditation handbook.

## **Equipment**

### **Major Equipment:**

There is an estimated cost of \$11,095 during the first program year for all major equipment – a Multi-station Gym Trainer for \$6,000 and a Diathermy Machine for \$5,095. The college has allocated \$5,000 for equipment in year two of the proposed program.

In addition to the major items, it is estimated an additional \$66,993 will be needed for the purchase of other materials and supplies. Essential supplies and materials include such pieces as amputee dummies, Henley fluidotherapy units, stairs, JOBST pumps, tilt tables, parallel bars, E-stim, and electric hi-lo mat tables. Other much less expensive items such as crutches, walkers, wheelchairs, bandages, etc. will be required the first year. In years two and three, supplies and materials are not expected to exceed \$25,000.

## **Accreditation, Approval, Licensure or Certification**

### **Accreditation or Approval by Any State Agency**

PTA programs must be accredited by CAPTE in order for graduates to take the national exam. CAPTE also requires that pre-accreditation (Candidate for Accreditation) status be achieved prior to the first cohort of students being enrolled. This eight-month process will begin upon official approval of the proposed program. Following graduation of the first class, the college will apply for full accreditation status.

Estimated costs for accreditation are \$18,000 for the first year and an annual fee of \$2,700 for each of the subsequent years. First year costs consist of the non-refundable fee of \$12,000 to submit an application for candidacy, in addition to a \$6,000 fee for the on-site visit.

## Estimated Cost

### New expenditures: Three-year projection

The “New Costs to the Institution and Sources of Financing” table that follows itemizes the new expenses which the college will incur over the first three years of program initiation.

### NEW COSTS TO THE INSTITUTION AND SOURCES OF FINANCING

<b>ESTIMATED COST BY YEAR</b>				
<b>CATEGORY</b>	<b>1<sup>st</sup></b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>TOTALS</b>
Program Administration	\$0	\$0	\$0	\$0
Faculty Salaries (2.5 FTE)	\$140,500	\$144,715	\$149,056	\$434,271

Graduate Assistants	\$0	\$0	\$0	\$0
Clerical/Support Personnel	\$0	\$0	\$0	\$0
Supplies and Materials	\$66,993	\$25,000	\$25,000	\$116,993
Library Resources	\$700	\$700	\$700	\$2,100
Equipment	\$11,095	\$5,000	\$0	\$16,095
Facilities	\$26,000	\$0	\$0	\$26,000
Other (Accreditation)	\$18,000	\$2,700	\$2,700	\$23,400
<b>TOTALS</b>	<b>\$263,288</b>	<b>\$178,115</b>	<b>\$177,456</b>	<b>\$618,859</b>
Estimated FTE Revenue Generated from the State	\$0	\$30,141	\$87,313	\$117,454
Tuition Funding (New students only)	\$30,960	\$78,690	\$78,690	\$188,340
Other State Funding (Legislative Approp.)*	\$0	\$0	\$0	\$0
Reallocation of Existing Funds	\$232,328	\$69,284	\$11,453	\$313,065
Federal Funding**	\$0	\$0	\$0	\$0
Other Funding (Endowment, Auxiliary etc.)	\$0	\$0	\$0	\$0
<b>TOTALS</b>	<b>\$263,288</b>	<b>\$178,115</b>	<b>\$177,456</b>	<b>\$618,859</b>

\*Specify sources (s) (e.g., Special Item Appropriation, Auxiliary Enterprise Funds, Endowment Income, special grant or contract, etc.)

**PIEDMONT TECHNICAL COLLEGE  
INSTITUTIONAL APPROVAL**

Associate Degree in Health Science  
Major in Physical Therapy Assistant

Action to seek approval from the South Carolina Commission on Higher Education to offer an Associate Degree in Health Science with a Major in Physical Therapy Assistant has been reviewed and approved as of October 16, 2007 by all relevant administrative bodies at Piedmont Technical College. This includes the following:

- 1) The Dean of Health Science, Biological and Chemical Division
- 2) The Senior Vice President
- 3) The Vice President of Educational Affairs
- 4) The President of Piedmont Technical College

Piedmont Technical College Area Commission  
Approval Date: 10-16-07