

Piedmont Technical College  
New Program Proposal  
For  
Associate Degree in Health Science  
Major in Veterinary Technology  
October 2007

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Dr. Lex Walters  
President

## Classification

<b>Name of Proposed Program:</b>	Veterinary Technology
<b>Academic Unit Involved:</b>	Health Science
<b>Designation, type and level of degree:</b>	Associate Degree in Health Science Major in Veterinary Technology
<b>Proposed Date of Implementation:</b>	Fall 2008
<b>CIP Code:</b>	510808
<b>Identification of Program:</b>	New
<b>Program Location:</b>	Piedmont Technical College Newberry County Center

## 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. Piedmont Technical College 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 Veterinary Technology to provide students the opportunity to pursue training in a discipline of health science which is in high demand.

Currently, there is a strong demand for well-prepared veterinary technicians. The U.S. Department of Labor Bureau of Labor Statistics estimates the need for veterinary Technicians will increase by 35% from 2004-2014. In part, this estimate is because "pet owners are becoming more affluent and more willing to pay for advanced care because many of them consider their pet to be part of the family. This growing affluence and view of pets will spur employment growth for veterinary technicians." The Bureau of Labor Statistics further predicts that "biomedical facilities, diagnostic laboratories, wildlife facilities, humane societies, animal control facilities, drug or food manufacturing companies, and food inspection facilities will provide additional jobs for veterinary technicians." Survey data published in *The NAVTA Journal* further supports the need for veterinary technician graduates. According to the journal article, those in veterinary practice management "feel that for every veterinarian on staff, there should be two veterinary technicians." Coupled with the Bureau of Labor Statistics predictions, the data published in this article clearly supports the increasing demand for additional veterinary technicians.

PTC is proposing a two-year associate degree program designed primarily as a terminal degree. The goal of the proposed program is to prepare graduates to attain the required competencies needed to successfully complete the National Veterinary Technician Exam (NVTE) and the South Carolina licensure examination required to become a Licensed Veterinary Technician (LVT).

Graduates of the program will be prepared to obtain both state and national credentials. The college will seek accreditation by the American Veterinary Medical Association (AVMA) within the first year for the proposed program. Graduates will be prepared to do the following:

- Obtain and record patient case histories
- Collect specimens and perform laboratory procedures
- Provide specialized care
- Prepare animals, instruments, and equipment for surgery
- Assist in diagnostic, medical, and surgical procedures
- Expose and develop radiographs
- Advise and educate animal owners
- Supervise the humane care and handling of research animals
- Assist in the implementation of research projects
- Perform dental prophylaxes

### **Need for Program**

In the fall of 2006, Newberry College made the decision to discontinue their Veterinary Technology program. With national trends showing that Veterinary Technology programs are predominantly offered in two-year institutions, Newberry College approached PTC about assuming the responsibility of the program. As a result, PTC conducted a needs survey and implemented a certificate program in the fall of 2007. There are currently fourteen students in the certificate program.

PTC's needs survey echoes national and state-wide trends in the veterinary technology field. The needs survey of potential employers of veterinary technicians was done in the College's service area and the Columbia metropolitan area with written permission from Midlands Technical College (MTC). The Columbia area was included because there are currently no programs in midlands. In the Piedmont and Midlands areas, there are ninety-eight veterinary practices of all types, including emergency services, research, private, etc. that were identified through the South Carolina Association of Veterinarians. This represents 125 Doctors of Veterinary Medicine (DVM) and 42 licensed veterinary technicians. Fifty-five practices were randomly selected to be surveyed, and of those, the college received 31 responses.

In addition to the active veterinary practices, a new facility, SPF-USA-Pet Food Manufacturing, located in Greenwood County was included in the survey. PTC was approached by SPF-USA officials in early 2006 regarding the need for potential employees. The college has a letter of support on file for the veterinary technician program from SPF-USA's Vice President for Marketing. SPF-USA has committed to becoming a clinical affiliate as well as hiring veterinary technicians upon graduation.

The college's needs survey respondents anticipate employing 72 full-time and 30 part-time veterinary technicians over the next three years with an average entry-level salary of \$28,400 for full-time employees and a median hourly salary of \$12.00 for part-

time employees. The SC Veterinary Technologist and Technician 2004 salary data reported the median salary is \$26,255.

### **Centrality to College Mission**

PTC's central 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. Preparing students to be competent and professional employees is critical to 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 all of which are nationally accredited by their respective professional accrediting agencies. Certificates are offered in Massage Therapy, Medical Coding and Billing, Patient Care Technology, Phlebotomy, and Veterinary Technology. All of the health science programs were in good standing during the 2005-06 program evaluation review period. The proposed program will be an expansion of the current Veterinary Technology certificate program and will bring a new and exciting dimension to the wide array of health care programs offered at PTC. The goal of PTC is to offer the same quality in the Veterinary Technology program as seen in the existing programs.

### **Relationship to External Programs**

Two technical colleges in the state, Tri-County Technical College (TCTC) and Trident Technical College (TTC), currently offer an Associate Degree in Health Science with a major in Veterinary Technology. Both programs are accredited by the American Veterinary Medical Association (AVMA). Each of the established programs has reached the maximum allowable enrollment with TCTC serving the upstate and TTC serving the coastal region. The TCTC program has recently increased enrollment, but remains unable to accept all applicants. Both programs are in good standing according to the most recent program evaluation data; however, neither of the existing programs can meet the needs of the Piedmont region of the state.

## Enrollment

### Projected Total Student Enrollment

The proposed Veterinary Technology degree is expected to generate a total enrollment of 24 full-time students in the first semester of the program. This figure is based on the job opportunities identified in the employment needs survey and the continued growth in the field. The program enrollment for the second and third years is estimated at 38 and 41, respectively, with 24 new students enrolling each year. The enrollment projections include an anticipated attrition rate of 30% after the first summer term, due to lack of academic preparation, failure to maintain the required GPA, transfer to other academic programs or institutions, or personal problems. PTC anticipates graduating approximately 14-17 students from the program annually.

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

### Projected Total Student Enrollment

	Fall		Spring		Summer	
	Headcount	Credit Hours (16)	Headcount	Credit Hours (15)	Headcount	Credit Hours (12)
2008-09	24	384	19	285	17	204
2009-10	38	608	36	540	34	408
2010-11	41	656	38	570	36	432

### Estimated Additional Enrollment

	Fall		Spring		Summer	
	Headcount	Credit Hours (16)	Headcount	Credit Hours (15)	Headcount	Credit Hours (12)
2008-09	16	256	15	225	14	168
2009-10	24+14=38	608	22+14=36	540	20+14=34	408
2010-11	24+17=41	656	21+17=38	570	19+17=36	432

The Veterinary Technology program admission criteria will follow that of other Health Science Associate degree programs. The criteria will be as follows:

- High school diploma or equivalent
- Appropriate placement scores on COMPASS
- Completion of ENG 101, BIO 210, PSY 201, and MAT 102 with a 2.5 GPA
- High school biology, chemistry, physics and computer science highly recommended
- Demonstrate computer competency
- Submit to a criminal background check and drug screening

**Curriculum**

**Model Requirements**

The proposed Veterinary Technology program complies with the State Board for Technical and Comprehensive Education’s (SBTCE) model. The model requires the following: (a) a minimum of 15 hours of general education courses including social/behavioral sciences, natural science/mathematics, and humanities/fine arts; (b) a minimum of 15 hours in core subject area; (c) 30 – 47 additional hours required for graduation. The program is within the range of 60-77 required semester hour credits. A total of 72 credit hours with a 2.0 GPA will be required for graduation.

**Proposed Curriculum Configuration**

All courses list in the proposed program are currently in the SBTCE Statewide Catalog of Approved Courses and the college’s local catalog.

**Veterinary Technology**

First Semester		
BIO 102	Biological Science I	3-3-4
VET 101	Animal Breeds and Husbandry	2-3-3
VET 103	Veterinary Medical Terminology	2-0-2
VET 104	Veterinary Anatomy and Physiology	2-3-3
VET 105	Orientation to Veterinary Technology	1-0-1
MAT 102	Intermediate Algebra	3-0-3
	<b>TOTAL</b>	<b>13-9-16</b>
Second Semester		
BIO 115	Basic Microbiology	2-3-3

VET 109	Veterinary Parasitology	1-3-2
VET 140	Veterinary Pharmacology	2-0-2
VET 150	Clinical Techniques I	2-3-3
VET 117	Animal Nutrition	2-0-2
PSY 201	General Psychology	3-0-3
	TOTAL	12-12-15
Third Semester (Summer)		
ENG 101	English Composition I	3-0-3
VET 152	Clinical Pathology	3-3-4
VET 215	Laboratory Animal Medicine	1-3-2
	Humanities Elective	3-0-3
	TOTAL	10-6-12
Fourth Semester		
VET 201	Diseases and Zoonosis	4-0-4
VET 240	Office Management and Client Education	3-0-3
VET 160	Clinical Techniques II	2-3-3
VET 260	Clinical Techniques IV	1-6-3
VET 207	Large Animal Clinical Practice	2-3-3
	TOTAL	12-12-16
Fifth Semester		
VET 170	Veterinary Technician Externship	0-18-6
VET 250	Clinical Techniques III	2-3-3
VET 270	Advanced Medical Care	1-6-3
VET 280	Senior Seminar	1-0-1
	TOTAL	4-27-13
	TOTAL	72

### **Clinical Affiliations**

Of the 55 Employee Need Surveys that were mailed, the college received 31 responses. All of the responses were positive regarding clinical affiliation. The response rate is sufficient for clinical placement because, as noted above, the college will admit 24 students annually into the program. First-year students will not require clinical placement, and the college anticipates that there will be attrition prior to the second year.

## Faculty

### Rank and Academic Qualifications

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

List Staff by Rank (e.g. Professor #1, Professor #2, Associate Professor #1, etc.)	Highest Degree Earned	Field of Study	Teaching in Field (yes / no)
Program Coordinator / Instructor	BS / BA	Veterinary Technology Biology	Yes
Instructor	DVM	Veterinary	Yes

### Qualifications of New Faculty and Staff

PTC currently employs one full-time faculty member who is identified as Program Coordinator of the certificate program. In addition to the day to day operation of the Veterinary Technology program, the Program Coordinator has responsibility for instruction, student advisement, and course development. The Program Coordinator holds a Bachelor of Arts Degree in Biology and a Bachelor of Science Degree in Veterinary Technology.

AVMA accreditation criteria require that an educational program have a minimum of one full-time licensed veterinarian and one full-time veterinary technician. The current faculty member is a licensed veterinary technologist; therefore, one full-time DVM will be employed. First year salaries are estimated to be \$115,000 with a 3% increment thereafter.

### Proposed Changes in Assignment of Current Employees

The Veterinary Technology program will be a Health Science, Biological and Chemical Division program. There are no anticipated changes in assignments of current administration, staff, or the current Program Coordinator.

### Institutional Plans for Faculty Professional Development

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

- Require new faculty to attend a series of in-house in-service programs for new faculty. The development of a curriculum specific portfolio related to teaching is required.

- Financial support to attend conferences, seminars, and workshops related to Veterinary Technology.
- 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.
- PTC Foundation provides financial support for courses taken outside of the institution that lead to professional advancement which includes CEU's required for professional credentialing.

### **Institutional Definition of Full-Time Equivalent Faculty Member**

For faculty in the Health Science, Biological and Chemical Division, PTC defines an 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.

### **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. Instructional support will be the responsibility of the Health Science, Biological and Chemical Division Administrative Specialist. On 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>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>.10</b>
<b>2009-2010</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>.10</b>
<b>2010-2011</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>.10</b>
<b>Faculty</b>						
<b>2008-2009</b>	<b>1</b>	<b>.75</b>	<b>1</b>	<b>.75</b>	<b>2</b>	<b>1.5</b>
<b>2009-2010</b>	<b>1</b>	<b>.75</b>	<b>1</b>	<b>.75</b>	<b>2</b>	<b>1.5</b>
<b>2010-2011</b>	<b>1</b>	<b>.75</b>	<b>1</b>	<b>.75</b>	<b>2</b>	<b>1.5</b>
<b>Staff</b>						
<b>2008-2009</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>.10</b>	<b>1</b>	<b>.10</b>
<b>2009-2010</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>.10</b>	<b>1</b>	<b>.10</b>
<b>2010-2011</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>.10</b>	<b>1</b>	<b>.10</b>

## Library

In 2006-2007, with the beginning of the Veterinary Technology certificate program, the library purchased over 25 titles totaling almost \$1,300. The table below shows library funds that have been earmarked for the Veterinary Technology collection over the next three years to supplement the existing collection. 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>

### Library Overview

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. Staffed Library Resource Centers (LRC's) operate on the Laurens and Newberry campuses. The LRC combines the function of the library, a computer lab, and a testing center. Students and faculty using the LRCs will find circulating and reference books, popular magazines and newspapers, audiovisual materials, and access to Internet computers that connect them to the same online resources that are available on the Greenwood campus. Part-time LRC Coordinators either assist students on site or refer them to library staff at the Main Library who can help satisfy their research needs.

A daily courier service delivers most library materials to any college location at the request of students or faculty. Requests may be made via an online form or by talking to a library or LRC staff member. Descriptions of library services, resources and policies also appear in the college catalog, on the Web site, and on various printed promotional materials such as bookmarks and brochures.

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.

## **Veterinary Technology Resources**

Within the existing collection, library users will already find many resources related to the study and practice of veterinary technology. The library staff has identified 32,613 books and 323 journals specific to Veterinary Technology. A listing of these resources, identified by call numbers, is printed and posted in the classroom at the Newberry County Center.

### **Books**

There are existing print book holdings at the Main Library in Greenwood as well as in the Learning Resource Center at the Newberry County Center. The resources that are currently housed in Newberry were purchased during 2006-2007 to support the existing certificate program offered by PTC.

Additionally, students and faculty are able to request books pertaining to Veterinary Technology from any university or college library in South Carolina, including those that offer degrees relating to veterinary science. These books arrive within two days at no expense to the requestor. A second interlibrary loan program allows students and faculty to request books or articles from other libraries nationwide.

### **Electronic Book/ Periodical Literature**

Within the 46,000+ searchable, full-text books owned by the library, students and faculty will find almost 4,700 titles relating to veterinary technology, and 61% of these titles have been 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 Veterinary Technology. These titles/resources are accessible 24/7 via the Internet.

## **Physical Plant**

### **Physical Plant Requirements**

The Veterinary Technology certificate courses, both lecture and lab, are taught in a recently renovated space at the Newberry County Center. There are no additional physical plant requirements anticipated.

### **Estimated Cost for Addition or Modification**

There is no anticipated cost for additions or modifications.

## **Equipment**

### **Procurement of Equipment**

Prior to the beginning of the certificate program, Newberry College was very gracious in negotiating with the PTC Foundation for the purchase of equipment and supplies. Additional equipment has been procured and is in place at the Newberry County Center; therefore, no additional major equipment purchases are anticipated. However, it is estimated that supplies and materials will cost \$25,000 in 2008-09 followed by an annual expenditure of \$20,000.

### **Itemized List of Major Pieces of Equipment**

None anticipated.

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

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

Standards of accreditation for Veterinary Technology programs have been established by the AVMA through the Committee on Veterinary Technician Education and Activities (CVTEA). AVMA conducts evaluative site visits for new programs when the initial class has completed approximately two-thirds of the curriculum. Piedmont Technical College will apply for accreditation within the first year of the program. Graduates of accredited programs are eligible to take the NVTE.

Although the proposal program is designed as a terminal degree, the college is open to articulating with Pre-Veterinary programs in the future.

### **Graduates are subject to licensure or certification by public or private agency**

The criteria to become a LVT in South Carolina are as follows:

- Be a graduate of a program that is accredited by the American Veterinary Medical Association
- Pass the NVTE
- Pass the South Carolina Veterinary Technician Licensure Exam administered by the South Carolina Board of Veterinary Medical Examiners

The instruction in the Veterinary Technology program will provide both the theory and clinical experience that graduates will need in order to become licensed by passing the state and national exams.

## Estimated Cost

### New expenditures: three-year projections

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 for an Associate Degree Veterinary Technology program.

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

<b>ESTIMATED COSTS BY YEAR</b>				
CATEGORY	1 <sup>ST</sup>	2 <sup>ND</sup>	3 <sup>RD</sup>	Totals
Program Administration	\$0	\$0	\$0	\$0
Faculty Salaries	\$115,000	\$118,450	\$122,033	\$355,483
Graduate Assistants	\$0	\$0	\$0	\$0
Clerical/Support Personnel	\$0	\$0	\$0	\$0
Supplies and Materials	\$25,000	\$20,000	\$20,000	\$65,000
Library Resources	\$700	\$700	\$700	\$2,100
Equipment	\$0	\$0	\$0	\$0
Other (Accreditation)	\$8,500	\$500	\$500	\$9,500
Facilities	\$0	\$0	\$0	\$0
<b>TOTALS</b>	<b>\$149,200</b>	<b>\$139,650</b>	<b>\$143,233</b>	<b>\$432,083</b>
<b>SOURCES OF FINANCING BY YEAR</b>				
Estimated FTE Revenue Generated from the State (See note on page 25).	\$0	\$32,495	\$85,289	\$117,784
Tuition Funding (new student only)	\$33,024	\$78,432	\$78,432	\$189,888
Other State Funding (Legislative Approp.)*	\$0	\$0	\$0	\$0
Reallocation of Existing Funds*	\$116,176	\$28,723	\$0	\$144,899
Federal Funding*	\$0	\$0	\$0	\$0
Other Funding (Endowment, Auxiliary, etc.)	\$0	\$0	\$0	\$0
<b>TOTALS</b>	<b>\$149,200</b>	<b>\$139,650</b>	<b>\$163,721</b>	<b>\$452,571</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 Veterinary Technology

Action to seek approval from the South Carolina Commission on Higher Education to offer an Associate Degree in Health Science with a Major in Veterinary Technology has been reviewed and approved by all relevant administrative bodies at Piedmont Technical College. This includes the following:

- 1) The faculty of the certificate Veterinary Technology program.
- 2) The Dean of Health Science, Biological and Chemical Division
- 3) The Senior Vice President
- 4) The Vice President of Educational Affairs
- 5) The President of Piedmont Technical College

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