

**SOUTHERN WEST VIRGINIA COMMUNITY
AND TECHNICAL COLLEGE**

PROGRAM REVIEW

FOR

MEDICAL LABORATORY TECHNOLOGY

2015

**Southern West Virginia Community and Technical College
Division of Career and Technical Programs - Department of Allied Health
Medical Laboratory Technology, Associate in Applied Science**

Program Review Summary

A. Adequacy

- The curriculum requirement adequately meets the required National Accrediting Agency for Clinical Laboratory Sciences and general education requirements core curriculum
- The program is adequately staffed with qualified faculty.
- The entrance requirements for students are consistent with Southern West Virginia Community and Technical College's standards.
- Graduate job placement within their field of study has been very successful.
- The graduates consistently have high passage rates on certification examinations.
- An advisory committee is actively involved in the program.
- The assessment system ensures that the student has attained the proper educational objectives.

Conclusion: The program meets and exceeds the minimum adequacy requirements.

B. Viability

- The number of students graduating from the program is acceptable and is expected to continue through the next assessment period.
- The program maintains clinical contracts with facilities in Charleston, Logan, Madison, South Charleston and Williamson, West Virginia.
- The program has the benefit of exceptional support and involvement from area hospitals and lab personnel.
- Technology has been incorporated in the classroom/lab setting suitable to this course of study.

Conclusion: The program meets minimum requirements for viability as a major.

C. Necessity

- The program meets both an educational and employment need in the service area as well as the nation.

Conclusion: The program is a necessary program.

D. Consistency with Mission

- The program supports the mission and vision of the institution.

Conclusion: The program is consistent with the Mission of the College.

**Medical Laboratory Technology
Associate in Applied Science
Southern West Virginia Community and Technical College**

I. Program Title, Degree Designation, and Brief Description

The Medical Laboratory Technology (MLT) program at Southern West Virginia Community and Technical College (Southern) is a department within the Division of Healthcare and Business Programs. This program is designed to be completed in two years and upon completion the graduate will receive an associate in applied science degree. Additionally, this program prepares students wishing to pursue a bachelor's degree in Medical Laboratory Technology at another institution with the foundation and background needed to do so.

The primary goal of the MLT program and Southern is to prepare students with the basic skills and knowledge needed to successfully begin their careers as Medical Laboratory Technicians. This is accomplished by a curriculum of MLT courses taught concurrently with related field courses and general education courses. Additionally, MLT courses utilize valuable on-campus student laboratories consisting of guided experiments and experiences, as well as a two week summer phlebotomy practicum and a 16 week clinical practicum during the program's last semester which takes place in one or more of Southern's clinical affiliates.

Southern's MLT program has developed several goals which are consistent with the National Accrediting Agency for Clinical Laboratory Sciences' (NAACLS) standards and Southern's mission. These goals can be found at the end of Appendix III.

Strong support for Southern's MLT program is evidenced by the number of area health agencies participating as clinical affiliates in the program as well as the number of graduates hired by area health care agencies each year. Health care agencies have a continuous need for well trained and qualified Medical Laboratory Technicians who are willing to live and work in rural southern West Virginia. This was the original purpose for which the MLT program was started in 1974 and still holds true today.

The MLT program was last reviewed in 2010. The program was recommended for continuation at the current level of activity without any deficiencies or need for corrective action.

II. Special Accreditation Information

Southern's MLT program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). NAACLS is an international agency for accreditation and approval of educational programs in the clinical laboratory sciences and related health professions. NAACLS is recognized by the United States Department of Education (USDE) and the Council for Higher Education Accreditation (CHEA).

Southern's MLT program received the maximum 5 years initial accreditation in April 1995 and received the maximum 7 years accreditation in 2000 and 2007. The last accreditation award in April of 2014 yielded the maximum 7 years regular accreditation as well with no deficiencies noted. A copy of NAACLS' letter conferring accreditation, NAACLS' formal accreditation certificate, and a copy of Southern's MLT Self-Study accreditation document prepared in 2014 is available for review upon request.

A. Adequacy

1. Curriculum

The courses within Southern's Medical Laboratory Technology curriculum meet the accreditation standards set forth by NAACLS. The MLT curriculum spans four semesters and a summer semester between the first and second years being utilized for a concise two week clinical rotation in phlebotomy. The support courses required in the program can be found in the curriculum plan for the MLT program located in Appendix I.

Southern's MLT program contains 37 credit hours of course work specific to the field of Medical Laboratory Technology and 23 credit hours of support courses in related fields, general education and electives. Additionally, students may ladder their health care career education, moving from a Health Care Technology certificate to the MLT associate degree with 14 hours or more of their credits going toward this degree.

A copy of the MLT curriculum can be found in Appendix I.

2. Faculty

Two faculty members are employed to deliver the MLT program as well as the Medical Laboratory Assistant program. Both meet the educational and certification requirements stipulated by NAACLS for the positions they hold in the programs.

Vernon R. Elkins is a full-time tenured professor/MLT Program Coordinator, who instructs the MLT courses as well as performs administrative duties related to the coordination of the program. Mr. Elkins is certified as a Medical Technologist (MT) by the American Society of Clinical Pathologists (ASCP) and holds a B.S. degree in Medical Laboratory Technology and a MA in Education Administration and Leadership Studies from Marshall University. Maintaining a high level of dedication toward his responsibilities and the continued improvement of the MLT program, Mr. Elkins stays current in Medical Laboratory Technology, as well as educational and teaching methods by attending workshops/seminars and participating in various other continuing education opportunities (list available upon request). He maintains involvement with his profession at the state level by attending medical laboratory conferences. Mr. Elkins served on the WVSCLS Board of Directors for two terms from 1998 to 2002. He has 12 years of clinical experience as a Medical Technologist with the last five being served as chief medical technologist/laboratory manager prior to being hired at Southern in January 1991. Additionally, he worked part-time for approximately two years at Logan General Hospital after being employed by Southern.

Shirley Dardi is employed by Southern as full-time faculty at the assistant professor level. She is certified as a Medical Laboratory Scientist [MLS (ASCP)], has her RBA degree from West Virginia State University and currently a student at Marshall University Graduate College, pursuing a degree in Adult and Technical Education with 27 hours completed. She assists Mr. Elkins in team teaching the MLT courses with her primary responsibilities within the MLT program being the preparation and instruction of the student MLT laboratories and teaching part of the didactic portion of ML 103 - Immunohematology and Serology. She has approximately 26 years of medical laboratory work experience, and 22 years of experience instructing students in the student MLT lab. Mrs. Dardi attends Medical Laboratory Technology

seminars/workshops, participates in continuing education opportunities, and presently holds a medical laboratory flex position at Logan Regional Medical Center to keep abreast of the latest information in this field.

3. Students

Entrance Abilities:

Students accepted into the MLT Program must be eligible to enter college level English and math by the application deadline. The ACT and/or the ACCUPLACER tests can be utilized to evaluate the English and math requirement if entering students have not already successfully completed EN 101 or a MT 100 or higher math course. In 2014, the MLT program began utilizing students' ACT scores in place of the National League for Nursing (NLN) Pre-Allied Health/Pre-RN Entrance Exam scores in order to determine entrance into the MLT Program. Any MLT applicant meeting a minimum ACT total score of 72 or higher for the four sections of the test and chose MLT as their first career choice were accepted before considering applicants where MLT was their second or greater choice. However, when available positions are not filled, a score less than 72 will be utilized to fill any remaining vacancies.

Applicants meeting the above admission criteria are selected competitively with highest ACT scores given preference. Presently, 20 students are selected to be admitted into the MLT Program each year. This number is determined by Vernon Elkins, MLT Program Coordinator, Shirley Dardi, MLT faculty and Steven Hall, Division Head of Healthcare and Business Programs, in accordance with NAACLS standards.

Students accepted into the MLT program have varying degrees of ability. Even though students meet the above entrance requirements, students' abilities vary based on their individual backgrounds in science, biology, chemistry, math, and other areas. Also, a student's dedication and effort while in the MLT program plays an important part in their success.

The average ACT composite score for students accepting positions in the MLT program for the last five years was 19.20. See chart below for individual year figures which also includes Accuplacer averages as well.

Year Adm.	ACT Comp Avg.	Accuplacer Averages			
		Reading	Sentence	Arithmetic	Elementary Algebra
2014	19.85	91.0	79.57	75.57	54.67
2013	18.9	80.0	87.5	68.86	60
2012	20.29	85.67	84.33	74.67	48.4
2011	18.63	74.2	71.6	71.86	45.0
2010	18.31	46.5	73.33	60.0	47

Exit Abilities:

Upon completion of the Medical Laboratory Technology program, students will have acquired the basic knowledge and skills necessary to begin their careers as a Medical Laboratory Technician. Specific abilities will be available upon request.

Southern's MLT graduates have historically done very well on their American Society of Clinical Pathology certification examinations. Graduates achieved 100% passage for two of the last five years (2011 & 2012), with an overall 89.6% passage rate for the 48 graduates during this review period (see chart below). It should be noted that these figures and the five year chart below reflects first attempt passage rates for MLT graduates which is what NAACLS requires for reporting purposes. Additionally, Southern's MLT program consistently meets or surpasses national passage rates.

SOUTHERN WEST VIRGINIA COMMUNITY AND TECHNICAL COLLEGE American Society of Clinical Pathologists Board of Certification Examination Passage Rates for First Time Examinees					
Year	Number Taking Exam	Number Passing Exam	Percent Passage Rate	National Passage Rate (ALL)	National First Time Examinees Passage Rate
2014	11	9	81.8%	72.8%	77.5%
2013	9	8	88.9%	74.14%	78.9%
2012	6	6	100%	73.5%	77.4%
2011	14	14	100%	74.2%	79.7%
2010	8	6	75%	70.7%	75.8%

4. Resources

The MLT Program receives an annual budget from the college for its general operation. While the MLT budget has experienced reductions during the 5 year review period, the budget has been sufficient to purchase student laboratory reagents and supplies, maintain office operations and provide for travel of faculty.

It should be noted that Perkins funds have been utilized to supplement the purchase of some laboratory equipment. Additionally, we have received some donations of supplies and equipment from area hospitals. These donations and Perkins funds have been considerably important in maintaining the present level of instruction in the MLT program.

The laboratory and classrooms utilized by the MLT program located in Building C on the Logan Campus are very nice and meet the needs of the program.

The MLT Program utilizes eight facilities to provide clinical experiences for MLT students and has used two additional facilities during the 5 year period being reviewed. Presently Williamson Appalachian Regional and Raleigh General Hospitals are not being utilized due to state and hospital policies respectively but we do desire to add them again in the

future if possible. Students receive excellent training and on-site supervision from personnel working for these affiliates. The facilities presently used in West Virginia include:

1. Boone Memorial Hospital
2. Charleston Area Medical Center Memorial Division
3. Charleston Area Medical Center Women's and Children's Hospital
4. Charleston Area Medical Center General Division
5. Logan Regional Medical Center
6. Saint Francis Hospital
7. Thomas Memorial Hospital
8. Williamson Memorial Hospital

5. Assessment Information

Assessment relating to student performance and program quality is evaluated in a number of formal and informal ways. Formal methods include mandated evaluation of faculty by an administrator and by the students in each course each semester. Additionally, review of certification examination results for the Board of Certification - American Society of Clinical Pathologists (ASCP), review of graduate surveys, graduate supervisor surveys, and student evaluation of clinical affiliates surveys all provide valuable information toward program improvement. In addition to these formal methods, feedback from current and former students as well as conversations with peers within and outside the discipline provides useful informal assessment information. Information from evaluations, certification exams, surveys and informal methods are utilized to improve MLT course content, method of delivery, and clinical training. This is a continuous on-going process. ASCP certification passage results can be found in section 3.

Southern's MLT department mails graduate surveys out approximately five months after graduation. Graduates are asked for permission to send their supervisor a survey and if given, a graduate supervisor survey is sent. These surveys provide insight from both the graduates' and their supervisors' perspective.

Southern's MLT Program consistently gets high ratings from both graduates and their supervisors. Additionally, feedback coming from laboratory managers and personnel during our advisory meetings or when Mr. Elkins or Mrs. Dardi are visiting these facilities during students' clinical training is very positive. It is not uncommon to hear that our students are very prepared, that they have good attitudes and that laboratory managers prefer to hire Southern MLT graduates when possible.

The MLT Assessment Matrixes for years 2009 through 2013 which summarize assessment measures for the MLT program are located in Appendix III. The MLT Assessment Plan will be available upon request.

Graduate and supervisor survey results for the previous five years, in addition to a copy of the actual survey forms, will be available upon request.

6. Previous Program Review

The Medical Laboratory Technology program was approved during the last review in 2010 with no further recommendations for the program.

7. Advisory Committee

Southern has had an active and involved MLT Advisory Committee for over 30 years. It meets in the spring of each year to provide input for the MLT Program through review, evaluation, discussion, and recommendation. The MLT Advisory Committee is composed of the MLT Program Coordinator, MLT faculty, Clinical Site Coordinators or designees, principal clinical instructors and other profession related individuals. Attendance by committee members has always been adequate to garner sufficient input from its members. An MLT Advisory Committee member list and minutes of these meetings are on record and available upon request.

8. Strengths/Weaknesses

The following is a list of the MLT program's strengths determined by the program faculty.

- Exceptional support and involvement from area hospitals and personnel
- Qualified and dedicated faculty, staff and administration
- Extremely high job placement rates within the service area supporting program necessity
- Accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) with a history of receiving the maximum years accreditation
- Graduate and employer satisfaction
- High passage rates on certification examinations

Additionally, the following are areas of strength noted by the two NAACLS site visitors in their accreditation report after their visit in October 2013.

- Graduates are proud of their education and recommend the program to others
- Graduates are sought after to fill vacant positions at clinical sites
- Student lab is spacious and well equipped
- Administration is very supportive of the program as demonstrated in the attention that was given in the site visit process
- Students and graduates report that the 2 faculty members are caring, supportive and go the extra mile to ensure that the students learn the material thoroughly
- Clinical sites are very supportive and there are more clinical sites than students
- The Program Director and faculty member are knowledgeable, dedicated and assets to the college

No program weaknesses, concerns or recommendations were noted by the NAACLS site visit team in their report to the NAACLS Board of Directors after their October 2013 accreditation visit.

B. Viability

1. Number of Students Admitted/Enrolled per year for previous five years
2. Enrollment Trends for previous five years
3. Number of Graduates for previous five years

For numbers one, two and three above, see charts below.

1 and 3

SOUTHERN WEST VIRGINIA COMMUNITY AND TECHNICAL COLLEGE MLT ENROLLMENT/GRADUATION STATISTICS (Applicants, Enrollees, and Graduates)			
Year	Applicants	Number Admitted and Enrolled	*Number of Graduates
2014	117	18	11**
2013	222	19	9
2012	129	17	6
2011	117	16	14
2010	165	16	8

*Note - Students listed are those that graduated for the year listed. These graduates were actually admitted two years prior. (Example: 2010 graduates were actually admitted in 2008).

**One student is scheduled to graduate December 2014 bringing the total to 12 graduates.

2.

ENROLLMENT BY SEMESTER AND YEAR		
Semester and Year	1st Year Student Enrollment	2nd Year Student Enrollment
Fall 2014	18	14
Spring 2014	13	12
Fall 2013	19	13
Spring 2013	14	9
Fall 2012	17	9
Spring 2012	11	6
Fall 2011	16	6
Spring 2011	9	14
Fall 2010	16	14
Spring 2010	15	8

4. Enrollment Projections

The MLT program at Southern is expected to maintain the current number of students accepted into the program. No problems are foreseen in maintaining this number over the next five years due to the level of interest shown by area students in all of Southern's Allied Health programs and the high job placement rates that MLT graduates experience in our service area. Additionally, Southern's MLT program is promoted very well by area hospitals, Southern employees, MLT graduates and present MLT students.

5. Articulation Agreements

Southern's MLT Program has an articulation agreement with Marshall University's Clinical Laboratory Sciences department which allows graduates of Southern's MLT Program to transfer their Southern credits which includes the MLT specific courses and continue their education in Marshall's B.S. Clinical Laboratory Sciences program. Prior to this formal articulation agreement, a few of Southern's MLT graduates have been allowed to complete their B.S. degree in Clinical Laboratory Sciences at Marshall by taking some additional courses. It should be noted that the financial situation of many of Southern's students and the rather small initial gain in salary going from A.S. to B.S. degree compels most MLT graduates to go directly to work after graduation. This articulation agreement is available for review upon request.

C. Necessity:

Southern's MLT Program has consistently maintained a high job placement rate since the program's first graduating class in 1976. Southern's service area as well as the nation, maintains a consistent need for competent Medical Laboratory Technicians which is expected to increase. Southern's MLT job placement rates which can be reviewed below support this.

MLT JOB PLACEMENT STATISTICS

Year	Number of Graduates	Number Working	Percent Working*
2014	11	11	100%
2013	9	8	88.9%* (1 did not seek employment)
2012	6	6	100%
2011	14	14	100%
2010	8	6	75% (1 graduate stayed home with her young children and one graduate found employment after the date to be counted as employed)

*Jobs were available for those who chose not to go to work immediately after graduation.

The overwhelming majority of Southern's MLT graduates are employed within an approximate 100 mile radius of the Logan Campus. As determined by surveys, the average hourly rate has been gradually increasing each year which is expected to continue. Starting salary ranges for this area range from an approximate low of \$13.50 per hour to an approximate high of \$20.00. The average MLT graduate hourly salary for this five year review period was \$15.49

which is an increase of \$1.13 for the previous five year review period. These figures tend to vary up and down depending on which facility hires the majority of our graduates. O*NET Online for 2013 reported the national average MLT salary at \$37,970 or \$18.26 per hour and between 2012 to 2022, projects 90,200 job openings in the field. Nationally, colleges are graduating approximately 5,000 individuals to fill these laboratory positions which means about a 4,000 deficit yearly and 40,000 for the projected 10 year period. Additionally, ASCP surveys consistently places the national vacancy rate at about 7.0% in this field annually.

It is likely that hospitals in this rural service area would experience difficulties hiring laboratory personnel and be paying MLTs considerably more if it were not for Southern's MLT program. Additionally, even with considerably higher salaries, the service area would encounter a chronic and considerable shortage of qualified laboratory personnel. The aging population of southern West Virginia has health issues with diabetes, cancer and respiratory problems that are some of the highest in the nation. A health care shortage of any type in southern West Virginia would only exacerbate this already serious problem. Southern's service area is somewhat sheltered from critical health care personnel shortages due to Southern assisting in filling this health care need. The cost of not having Southern's MLT program would be felt immediately by the service area and would escalate quickly to a situation that could be injurious to regional patient care.

D. Consistency with Mission

The philosophy, purpose, goals, and objectives in the MLT program are consistent with the mission of the college. Southern West Virginia Community and Technical College and its MLT program exists to serve the communities of Southern West Virginia. The college strives to fulfill current and future higher educational and vocational/technical needs of the resident. The college emphasizes accessible quality learning, enabling students to achieve work, career, and personal success.

Southern's success in meeting its mission is evident in the large number of Southern MLT graduates who constitute the staff of area hospitals and other health care providers. Not having the yearly pool of MLT graduates from Southern to fill laboratory positions in our service area would not only present difficult staffing situations for these health care providers but also could result in compromised health care for our aging population who deserve to get fast accurate laboratory test results upon which doctors, physician assistants, nurse practitioners and other health care personnel need to make informed decisions concerning patient care.

III. Recommendation

It is recommended that Southern's Medical Laboratory Technology Program continue at the current level of activity without corrective action.

Appendix I

MEDICAL LABORATORY TECHNOLOGY
Associate in Applied Science
60 Semester Hours

Purpose: The Medical Laboratory Technology Program at Southern West Virginia Community and Technical College was developed to fulfill the need for qualified medical laboratory personnel in southern West Virginia. There is a demand for medical laboratory technicians in West Virginia as well as the country. Professional, competent personnel who are certified to examine and analyze laboratory specimens are essential to quality health care. Southern's program aims at helping students attain the basic knowledge and skills necessary to begin their career in the field of medical laboratory technology.

Recommended Program Sequence

FIRST YEAR - FIRST SEMESTER

Dept.	Course No.	Title	Credit Hours
BS	124	Anatomy & Physiology I	4
CH	203	Fund. of General, Organic, & Biological Chem.	4
ML	101	Clinical Hematology	5
MT		MT 128 (Algebra for Allied Health) or higher	3
Total Hours			16

FIRST YEAR - SECOND SEMESTER

Dept.	Course No.	Title	Credit Hours
BS	125	Anatomy & Physiology II	4
EN	101	English Composition I	3
ML	102	Clinical Chemistry	5
ML	103	Immunochemistry and Serology	5
Total Hours			17

SUMMER SESSION

Dept.	Course No.	Title	Credit Hours
ML	200	Phlebotomy Practicum	1
Total Hours			1

SECOND YEAR - FIRST SEMESTER

Dept.	Course No.	Title	Credit Hours
		Restricted Elective Choose SO 200 or PY 218	3
AH	203	Communication Skills for the Health Care Prof.	1
CS		1 hour of any CS course	1
ML	201	Urinalysis & Body Fluids	2
ML	202	Clinical Microbiology	5
Total Hours			12

SECOND YEAR - SECOND SEMESTER

Dept.	Course No.	Title	Credit Hours
ML	205	MLT Seminar	2
ML	210	MLT Clinical Practicum	12
Total Hours			14

Total Program Hours 60

Institution: Southern West Virginia Community and Technical College
Degree Program: Medical Laboratory Technology Program

Courses Required in Major (by title & course number)	Credit Hours	Additional Credits Required in Major Required	Credit Hours	Related Fields Courses Required	Credit Hours
ML 101 Clinical Hematology	5	EN 101 English Composition I	3	BS 124 Human Anatomy & Physiology I	4
ML 102 Clinical Chemistry	5	Restricted Elective – Choose SO 200 or PY 218	3	BS 125 Human Anatomy & Physiology II	4
ML 103 Immunohematology & Serology	5	CS – Any 1 hour CS Course – 100 level or above	1	CH 203 Fundamentals of General, Organic & Biological Chemistry	4
ML 200 Phlebotomy Practicum	1			AH 203 Communication Skills for Health Care Professional	1
ML 201 Urinalysis and Body Fluids	2			MT 128 Algebra for Allied Health	3
ML 202 Clinical Microbiology	5				
ML 205 MLT Seminar	2				
ML 210 MLT Clinical Practicum	12				
TOTAL	37	TOTAL	7	TOTAL	16

Total Credit Hours Required for Graduation: 60

Professional society that may have influenced the program requirements: The National Accrediting Agency for Clinical Laboratory Sciences.

APPENDIX II

APPENDIX II - Faculty Data

(No more than *TWO* pages per faculty member)

Name Vernon R. Elkins Rank Professor

Check one: Full-time X Part-time _____ Adjunct _____

Highest Degree Earned: MA - Ed. Administration/Leadership Studies
 Date Degree Received: July 1997
 Conferred by: Marshall University Graduate College
 Area of Specialization: Bachelor of Science - Medical Laboratory Technology

Professional registration/licensure: Medical Technologist (ASCP)

Years of employment at present institution: 24
 Years of employment in higher education: 24
 Years of related experience outside higher education: 14
 Non-teaching experience: 14

To determine compatibility of credentials with assignment:

(a) List courses you taught this year and those you taught last year: (If you participated in team-taught courses, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course number, course title and enrollment.

<u>Year/Semester</u>	<u>Course Number & Title</u>	<u>Enrollment</u>
2013/Spring	*ML 205 MLT Seminar	9
	ML 210 MLT Clinical Practicum	9
	*ML 103 Immunohematology & Serology	14
	*ML 102 Clinical Chemistry	14
2013/Fall	*ML 101 Clinical Hematology	19
	*ML 202 Clinical Microbiology	13
	*ML 201 Urinalysis and Body Fluids	13
2014/Spring	*ML 205 MLT Seminar	12
	ML 210 MLT Clinical Practicum	11
	*ML 103 Immunohematology & Serology	13
	*ML 102 Clinical Chemistry	13
2014/Fall	*ML 101 Clinical Hematology	18
	*ML 202 Clinical Microbiology	13
	*ML 201 Urinalysis and Body Fluids	13

*Denotes courses team-taught with Shirley Dardi, MLT faculty.
 ML 101, 102 and 202 - 80%; ML 103 - 40%; ML 201 - 80%; ML 205 - 90%

(b) If degree is not in area of current assignment, explain. N/A

(c) Identify your professional development activities during the past five years.

I have attended numerous training sessions every year at Southern West Virginia Community and Technical College on various technology, educational and job related topics. I attended the 13th, 14th, 15th, and 17th Annual Joint Meeting of WVCLMA, WVSCLS and WVSSAMT, where MLT related continuing education was provided. I subscribed 2010, 2011 and 2012 to “WVU’s Medical Technology Program Continuing Education by Correspondence”. I have viewed several webinars related to Medical Laboratory Technology. In the spring of 2014 I attended a two day workshop on “Fundamentals of Student Engagement Workshop”. In total, I have attended 77.75 documented contact hours of continuing education from 2010 through September 2014 which is available for review upon request.

APPENDIX II - Faculty Data

(No more than *TWO* pages per faculty member)

Name Shirley Dardi Rank Assistant Professor

Check one: Full-time X Part-time _____ Adjunct _____

Highest Degree Earned: Regents Bachelor of Arts

Date Degree Received: May 2008

Conferred by: West Virginia State University

Area of Specialization: Associate of Applied Science - Medical Laboratory Technology

Professional registration/licensure: American Society of Clinical Pathologists, WV State License

Years of employment at present institution: 22

Years of employment in higher education: 22

Years of related experience outside higher education: 26

Non-teaching experience: 26

To determine compatibility of credentials with assignment:

(a) List courses you taught this year and those you taught last year: (If you participated in team-taught courses, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course number, course title and enrollment.

<u>Year/Semester</u>	<u>Course Number & Title</u>	<u>Enrollment</u>
2013/Spring	AH 112 Basic Laboratory Procedures	10
	AH 113 Phlebotomy Clinical Practicum	10
	*ML 103 Immunohematology & Serology	14
	*ML 102 Clinical Chemistry	14
	*ML 205 Seminar	9
2013/Summer	ML 200 Phlebotomy Practicum	8
2013/Fall	AH 103 Principles of Phlebotomy	16
	*ML 101 Clinical Hematology	19
	*ML 202 Clinical Microbiology	13
	*ML 201 Urinalysis and Body Fluids	13
2014/Spring	AH 112 Basic Laboratory Procedures	14
	AH 113 Phlebotomy Clinical Practicum	14
	*ML 103 Immunohematology & Serology	13
	*ML 102 Clinical Chemistry	13
	*ML 205 Seminar	12
2014/Summer	ML 200 Phlebotomy Practicum	7

2014/Fall	AH 103 Principles of Phlebotomy	17
	*ML 101 Clinical Hematology	18
	*ML 202 Clinical Microbiology	13
	*ML 201 Urinalysis and Body Fluids	13

*Denotes courses team-taught with Vernon Elkins, MLT Program Coordinator.
ML 101, 102 and 202 - 20%; ML 103 - 60%; ML 201 - 20%; ML 205 – 10%

- (b) If degree is not in area of current assignment, explain. N/A
- (c) Identify your professional development activities during the past five years.

I attended various training and professional development sessions presented during Governance Day meetings held four times a year at Southern West Virginia Community and Technical College in areas such as: Banner training, student advising, disaster management, etc.

I attended in 2010 the 13th Annual Joint Meeting of WVCLMA, WVSCLS and WVSSAMT, where medical laboratory related continuing education was provided.

In addition to these, I also receive continuing education in my flex position at Logan Regional Medical Center in laboratory related topics of interest.

I am currently a student at Marshall University Graduate College, pursuing a degree in Adult and Technical Education. I will have completed 27 hours by December 2014.

APPENDIX III

**Assessment Matrix for Measuring Program Goals
Medical Laboratory Technology Program
Results for Year 2013**

MLT Goals 1-7 See attached (last page).						
Goals	Evaluation Method	When Conducted	Person Responsible	Results	Audience for Results	Use of Results
1	1. Certification Exam 2. Graduate Survey 3. Supervisor Survey 4. MAPP Test	1. Fall Semester 2. November 3. December 4. March	1. V. Elkins 2. V. Elkins 3. V. Elkins 4. V. Elkins	1. No problems noted 2. No problems noted 3. No problems noted 4. No problems noted	Southern, MLT Dept. and NAACLS	* See below
2	1. Supervisor Survey 2. Graduation Rates	1. December 2. Fall	1. V. Elkins 2. V. Elkins	1. No problems noted 2. 56% **see below	Southern, MLT Dept. and NAACLS	* See below
3	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Dardi	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below
4	Certification Exam	Fall Semester	V. Elkins	No problems noted 88.9% passage rate	Southern, MLT Dept. and NAACLS	* See below
5	Informal	On-going	V. Elkins / S. Dardi	No problems noted	Southern, MLT Dept. and NAACLS	* See below
6	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Dardi	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below
7	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Dardi	1. No problems noted 100% placement*** 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below

*Results are used to determine if current information and methods of delivery are adequate in required MLT courses, as well as whether present support courses are adequate.

** Nine of 16 students graduated. 5 of these graduates chose MLT as their 1st choice, 2 as their 2nd choice and 2 as their 3rd choice career. Of the 7 who did not complete the MLT program, 3 were 1st choice with 2 due to grades and 1 personal; 4 were 2nd choice with all due to grades. From this class, it does appear that those who choose MLT as their 1st choice are more likely to complete the MLT program but there is evidence that later choices do complete (2-2s and 2-3s), just not as high a percentage as 1st choices. One other thing to note with the selection of the class to begin in fall 2013, is that all 1st choices who met minimum requirements were accepted and then we went to 2nd choices. This process was a much faster getting 20 students to accept positions into the MLT program. In years past, when we accepted based on the highest points, regardless of choice, it took much longer and at least a few years we did not get the full 20 students. This will be discussed and considered when our next selection process takes place in the spring 2014 semester.

***Placement for those seeking jobs (one did not seek employment).

**Assessment Matrix for Measuring Program Goals
Medical Laboratory Technology Program
Results for Year 2012**

MLT Goals 1-7 See attached (last page).						
Goals	Evaluation Method	When Conducted	Person Responsible	Results	Audience for Results	Use of Results
1	1. Certification Exam 2. Graduate Survey 3. Supervisor Survey 4. MAPP Test	1. Fall Semester 2. November 3. December 4. March	1. V. Elkins 2. V. Elkins 3. V. Elkins 4. V. Elkins	1. No problems noted 2. No problems noted 3. No problems noted 4. No problems noted	Southern, MLT Dept. and NAACLS	* See below
2	1. Supervisor Survey 2. Graduation Rates	1. December 2. Fall	1. V. Elkins 2. V. Elkins	1. No problems noted 2. 38% (low)**see below	Southern, MLT Dept. and NAACLS	* See below
3	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Dardi	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below
4	Certification Exam	Fall Semester	V. Elkins	No problems noted 100% passage rate	Southern, MLT Dept. and NAACLS	* See below
5	Informal	On-going	V. Elkins / S. Dardi	No problems noted	Southern, MLT Dept. and NAACLS	* See below
6	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Dardi	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below
7	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Dardi	1. No problems noted 100% placement 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below

*Results are used to determine if current information and methods of delivery are adequate in required MLT courses, as well as whether present support courses are adequate.

** Six of 16 students graduated. 4 of these graduates chose MLT as their 1st choice and 2 as their 2nd choice career. Of the 10 who did not complete the MLT program, 5 withdrew (4- 2nd choices; 1- 1st choice); 1 – 1st choice stopped coming to class; 2 students completed 2 semesters and did not return for their 2nd year [1 had to take over family business (father ill) and 1 husband's job was transferred.] Both were performing well and had chosen MLT as their 1st career choice. From this class, it does appear that those who choose MLT as their 1st choice are more likely to complete the MLT program. This will be discussed and considered when our next selection process takes place in the spring 2013 semester.

**Assessment Matrix for Measuring Program Goals
Medical Laboratory Technology Program
Results for Year 2011**

MLT Goals 1-7 See attached.						
Goals	Evaluation Method	When Conducted	Person Responsible	Results	Audience for Results	Use of Results
1	1. Certification Exam 2. Graduate Survey 3. Supervisor Survey 4. MAPP Test	1. May/June 2. November 3. December 4. March	1. V. Elkins 2. V. Elkins 3. V. Elkins 4. V. Elkins	1. No problems noted 2. No problems noted 3. No problems noted 4. No problems noted	Southern, MLT Dept. and NAACLS	* See below
2	Supervisor Survey	December	V. Elkins	No problems noted	Southern, MLT Dept. and NAACLS	* See below
3	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Spriggs	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below
4	Certification Exam	May/June	V. Elkins	No problems noted 100% passage rate	Southern, MLT Dept. and NAACLS	* See below
5	Informal	On-going	V. Elkins / S. Spriggs	**See comment below related to adding Speech to curriculum	Southern, MLT Dept. and NAACLS	* See below
6	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Spriggs	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below
7	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Spriggs	1. No problems noted 100% placement 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below

*Results are used to determine if current information and methods of delivery are adequate in required MLT courses, as well as whether present support courses are adequate.

**English 102 was removed as a core requirement from Allied Health curriculum allowing Speech 103 or BU 205 to be put in it's place. This was done because Mr. Elkins remembered that a couple of committee members voiced concern over Speech being removed from the curriculum in the 1990s causing him to survey clinical coordinators and instructors during clinical visitations to determine whether there was a general consensus of need to put a speech/communication requirement back in the curriculum. Everyone asked felt that a course in communication would be very beneficial to the MLT graduates. Vernon Elkins and Shirley Spriggs agreed with this and were able to have the above changes made to the MLT curriculum and to take effect during the 2011 fall semester. This will allow the communication unit to be removed from ML 205 allowing more time on case studies and topic review.

**Assessment Matrix for Measuring Program Goals
Medical Laboratory Technology Program
Results for Year 2010**

MLT Goals 1-7 See attached.						
Goals	Evaluation Method	When Conducted	Person Responsible	Results	Audience for Results	Use of Results
1	1. Certification Exam 2. Graduate Survey 3. Supervisor Survey 4. MAPP Test	1. May/June 2. November 3. December 4. March	1. V. Elkins 2. V. Elkins 3. V. Elkins 4. V. Elkins	1. No problems noted 2. No problems noted 3. No problems noted 4. No problems noted	Southern, MLT Dept. and NAACLS	* See below
2	Supervisor Survey	December	V. Elkins	No problems noted	Southern, MLT Dept. and NAACLS	* See below
3	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Spriggs	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below
4	Certification Exam	May/June	V. Elkins	No problems noted 75% passage rate	Southern, MLT Dept. and NAACLS	* See below
5	Informal	On-going	V. Elkins / S. Spriggs	-Improve communication -Speech course added to curriculum for Fall2011	Southern, MLT Dept. and NAACLS	* See below
6	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Spriggs	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below
7	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Spriggs	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below

*Results are used to determine if current information and methods of delivery are adequate in required MLT courses, as well as whether present support courses are adequate.

**Assessment Matrix for Measuring Program Goals
Medical Laboratory Technology Program
Results for Year 2009**

MLT Goals 1-7 See attached.						
Goals	Evaluation Method	When Conducted	Person Responsible	Results	Audience for Results	Use of Results
1	1. Certification Exam 2. Graduate Survey 3. Supervisor Survey 4. Work Keys Test	1. May/June 2. November 3. December 4. March	1. V. Elkins 2. V. Elkins 3. V. Elkins 4. V. Elkins	1.No problems See comment below** 2. No problems noted 3. No problems noted 4. No problems noted	Southern, MLT Dept. and NAACLS	* See below
2	Supervisor Survey	December	V. Elkins	No problems noted	Southern, MLT Dept. and NAACLS	* See below
3	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Spriggs	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below
4	Certification Exam	May/June	V. Elkins	No problems noted** 100% passage rate	Southern, MLT Dept. and NAACLS	* See below
5	Informal	On-going	V. Elkins / S. Spriggs	No problems noted	Southern, MLT Dept. and NAACLS	* See below
6	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Spriggs	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below
7	1. Graduate Survey 2. Informal	1. November 2. On-going	1. V. Elkins 2. V. Elkins / S. Spriggs	1. No problems noted 2. No problems noted	Southern, MLT Dept. and NAACLS	* See below

*Results are used to determine if current information and methods of delivery are adequate in required MLT courses, as well as whether present support courses are adequate.

** Concerning review of performance for the follow-up 3 year period for the areas cited for concerns in 2006 (see “2006 Assessment Results” in MLT Assessment Manual). Those changes in curriculum and instruction for the areas of “Lab Operations” and “ Xmatch/Special Tests”, appear to be corrected. The results for the following 3 years were: Lab Operations: 495 (2007), 506 (2008), & 544 (2009); Xmatch/Special Tests: 545 (2007), 455 (2008), & 521 (2009).

SWVCTC MLT PROGRAM GOALS

The SWVCTC MLT Program has developed the following goals:

1. Provide students with both a general and technical education which will prepare them as competent entry level Medical Laboratory Technicians in hospitals and other health care environments.
2. Prepare graduates with the proper attitudes, knowledge and skills to realize a rewarding career in the clinical laboratory environment.
3. Prepare graduates to assume responsibility for self-growth and development in order to adapt to the changing needs of self and the laboratory medicine profession.
4. Prepare graduates with the necessary knowledge to be able to pass national certification examinations.
5. Prepare graduates to communicate in a facilitative, purposeful and respectful manner with patients, families, colleagues, and other members of the health care team.
6. Prepare graduates with the basis for continuing their undergraduate education in medical technology or other field of their choice.
7. Provide graduates with prospective job information in an effort to achieve 100% placement within 3 months of graduation.