Memorandum

TO: ABHES-Accredited Institutions and Programs
Recognized Accrediting Agencies
State Departments of Education
Kay Gilcher, U.S. Department of Education
Interested Parties

FROM: Carol Moneymaker, Executive Director

DATE: June 6, 2012

SUBJECT: Final Revisions to Accreditation Manual - Effective Immediately

Following distribution on February 1, 2012, to solicit public comment, the Commission of the Accrediting Bureau of Health Education Schools (ABHES) approved final revisions to the 17th Edition of the Accreditation Manual, effective immediately. New language is underlined and deleted language struck.

Visit www.abhes.org/News should you wish to review again the proposed changes that resulted in these final revisions.

Also, revisions to the annual sustaining fees were approved by the Commission (see page 17) to take into consideration the need for additional fee level.

The revised Accreditation Manual is posted at www.abhes.org/publications/accreditationmanual.
Chapter I

SECTION B – Policies Affecting Institutions and Programs

Subsection 4 – Fees and assessments

The Commission establishes and periodically modifies annual sustaining fees based on the needs of ABHES and user fees based on the approximate cost of providing the evaluation service for an institution or program. (See Appendix I, Fees). **Failure to pay fees timely may result in withdrawal of accreditation.**

Chapter II

SECTION A - Eligibility for Application

Prior to consideration for accreditation, the Commission will determine preliminarily whether an institution or program meets the requirements for accreditation.

Subsection 1 – Basic Requirements

a) **Institutional Eligibility**

In order for an institution to apply for accreditation by the Commission and to remain accredited, it must **have been legally operating and continuously providing instruction as an institution for at least the prior two years, during which time it must meet the following minimum criteria:**

(1) It is (a) an institution in the private sector at the postsecondary level whose principal activity is education, (b) a hospital or laboratory-based training school, (c) a vocational institution, or (d) a Veteran Administration hospital, rehabilitation institution, or a federally-sponsored training program.

(2) It is an educational institution that offers programs predominantly in the health education field. An institution meets this requirement if (a) 70 percent or greater of its full-time equivalent students are enrolled in health programs, or (b) 70 percent of its active programs are in the health education field, provided that a majority of an institution's full-time equivalent students are enrolled in those programs. A program is active if it has a current student enrollment and is seeking to enroll students.

(3) All of its programs are vocational in nature and are designed to lead to employment.

(4) It is located in the United States or its territories.

(5) It is properly licensed, chartered or approved to provide education beyond the secondary level under the laws and regulations of the state or territories in which it is located.

(6) **It must have been legally operating and continuously providing instruction as an institution for at least the prior two years.**
(7) It has a minimum enrollment of five (5) students in each program to be included in the grant of accreditation to allow evaluation of student outcomes. (Initial applicants only)

(7) It has at least one graduating class from at least one program(s) currently offered to determine the overall educational effectiveness of the program(s) of study offered.

b) Programmatic Eligibility

An organization offering a program in medical assisting, medical laboratory technology, or surgical technology education is eligible to apply for and be considered for programmatic accreditation if it meets the following criteria:

(1) it has a minimum enrollment of five (5) students in the program.

(2) It is (a) a public or private institution at the postsecondary level institutionally accredited by an agency recognized by the U.S. Department of Education or Council on Higher Education Accreditation (CHEA) whose principal activity is education, (b) a hospital or laboratory-based training school, or (c) a program in a Veteran’s Administration (VA) hospital, a rehabilitation facility, or a federally-sponsored Armed Forces program.

(3) Its program is vocational in nature and is designed to lead to employment.

(4) It is located in the United States or its territories.

(5) At the time of the visit, the program will have student participation in clinical experience activities, as applicable, to permit evaluation of program operations and of student progress, satisfaction, and retention. In addition, the program will have enrolled students who have completed at least 50% of the program or 25% of the core coursework.

(6) The coursework required for graduation, including didactic instruction and externship, provides the following:

(a) Medical Assisting

- attainment of entry-level competencies (see Program Requirements and Curriculum for Medical Assistants in Chapter VII), and consists of at least a 24-week full-time program of training.

(b) Medical Laboratory Technology

- attainment of entry-level competencies (see Program Requirements and Curriculum for Medical Laboratory Technology in Chapter VII), and at least 60-semester credit hours, 90 quarter credit hours, or its recognized clock-hour equivalent (normally two academic years) of training.

(c) Surgical Technology
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Effective Immediately
Page 4

- consistency with the current Core Curriculum for Surgical Technology, produced by the Association of Surgical Technology (www.ast.org).

SECTION B – Classifications of Campuses

Subsection 34 – Satellite campus

A satellite campus meets the following requirements:

a) It is licensed or otherwise approved by the appropriate state regulatory body.

b) It offers only one complete program of study.

c) It falls within main or non-main campus authority.

d) It is located at a different address of that of the main or non-main campus.

e) It provides all services that are offered at the main or non-main campus.

f) It maintains permanent student records at the satellite campus or at the main or non-main campus that are readily accessible to the satellite campus and students.

Subsection 34 – Separate classroom

A separate classroom meets the following requirements:

a) Staff is limited primarily to instruction.

b) Administration is from the main, or non-main or satellite campus to which it is assigned.

c) A complete program of instruction is not provided to ensure students spend an adequate amount of time at the main, or non-main or satellite campus to avail themselves to the administrative, student, and educational services offered by the institution.

d) All permanent records are maintained at the main, or non-main or satellite campus.

e) It has a different address from the main, or non-main or satellite campus and is within customary and reasonable commuting distance of that campus. If the classroom is within reasonable walking distance, it is considered a part of the main or non-main campus.

Facilities used to provide distance education methods of delivery are exempt from meeting the requirements for separate classroom space.
Chapter III

SECTION A - Applications, Evaluation, Approval Process and Recordkeeping

Subsection 9 – Recordkeeping

ABHES uses an electronic receipt and storage system for much of its accreditation activities. It retains indefinitely all electronic records of institutions and programs that it accredits. Institutions and programs are required to submit both an electronic and hard copy of materials to ABHES and, when directed, a hard copy identical to the electronic version.
CHAPTER VII-MLT

PROGRAMMATIC EVALUATION STANDARDS
FOR MEDICAL LABORATORY TECHNOLOGY

The Accrediting Bureau of Health Education Schools is recognized to accredit Medical Laboratory Technology programmatically. The program seeking or holding programmatic accreditation by ABHES must comply with the Accreditation Manual in its entirety, with the exception of Chapter IV, Evaluation Standards Applicable to Institutionally-Accredited Members, including Chapter V for all programs and Chapter VI for degree-granting programs and all appendices. This chapter contains additional specific requirements for a Medical Laboratory Technology program.

DESCRIPTION OF THE PROFESSION

Medical Laboratory Technicians (MLT), sometimes called Clinical Laboratory Technicians (CLT), use a variety of precise equipment, technologies and methodologies to examine and analyze the body fluids, cells, and tissues of the human body to identify pathogens. These laboratory analyses assist physicians in patient diagnosis, treatment, and prevention. Medical Laboratory Technicians are educated in the various disciplines included, but not limited to hematology, microbiology, clinical chemistry, immunology, and immunohematology.

In addition to preparing blood, urine, and tissue specimens for analysis, they also match blood for transfusions test for drug levels to show how a patient is responding to treatment. MLT/CLT’s are thoroughly trained in the use of sophisticated equipment and instruments, such as microscopes and cell counters.

Medical Laboratory Technicians are primarily employed in hospital laboratories, reference laboratories, but are also employed in clinics, research laboratories, blood centers, physician’s offices, medical industry companies, and biotechnology companies, and regulatory agencies.

CREDENTIALING

Credentialing in medical laboratory technology is encouraged for graduates of ABHES-accredited programs. Programs are expected to prepare students in necessary aspects of the curriculum included in the national credentialing examinations available in this field of study.
SECTION A – Curriculum, Competencies, Externship and/or Internal Clinical Experience

MLT.A.1. The depth and breadth of the program’s curriculum enables graduates to acquire the competencies necessary to become an entry-level professional in the medical laboratory technology field

Competencies required for successful completion of the program are delineated, and the curriculum ensures achievement of these entry-level competencies through mastery of content and skill achievement. Focus is placed on obtaining the skills and knowledge necessary for credentialing requirements and opportunities to obtain employment and to increase employability.

In order to present the subject matter necessary for successful completion of the program and to meet the stated objectives, the program is normally two academic years in length (60-semester credit hours, 90-quarter credit hours, or its recognized clock-hour equivalent), and has the following:

1. at least 800 hours in combined clinical and laboratory experience, including a minimum of 400 hours in an externship environment. Hours of bench-level clinical experience take place at an externship affiliate. Each program will be assessed for its effectiveness in achieving the program objectives and state requirements may dictate differently;

2. requisites (career development, medical terminology, medical law and ethics, college math, anatomy and physiology, and communication skills); and

3. a program curriculum that prepares the graduate to deal with workplace issues in a professional manner. Focus is placed on attitudes, values and beliefs that lead to sound ethical behavior. Student competencies are developed for effective interpersonal relationships with other health care professionals, problem solving, work management, and quality patient care. Program content is designed to prepare the student to develop critical listening skills, body language, and verbal skills for better overall communication in the allied health setting. Graduates from the program should be prepared to express logical ideas in writing and to demonstrate appropriate communication techniques for dealing with diverse patient populations.

To provide for student attainment of entry-level competence, the curriculum includes but is not limited to the following:

1. General Laboratory Orientation
   a. Introduction and review of the program
   b. Employment outlook
   c. General responsibilities
   d. General math and metrics
   e. Laboratory safety
   f. Laboratory instruments
   g. Glassware
   h. Microscope
   i. Introduction to computers
   j. Laboratory information systems

Graduates will:
   a. Understand the program curriculum.
b. Understand the employment outlook in the field
c. Use math and the metric system in laboratory calculations
d. Use laboratory glassware and pipette devices properly
e. Process electronic patient information
f. Operate laboratory equipment and perform maintenance
g. Adhere to biohazard safety procedures
h. Adhere to policies and procedures for fire, chemical, and electrical safety
i. Operate and maintain a microscope
j. Perform requisition processing
k. Perform specimen processing
l. Define specific laboratory information systems

2. Professionalism
Graduates:
a) Exhibit dependability through attendance, punctuality, and reliability
   b) Project a positive attitude
c) Maintain patient confidentiality at all times (HIPAA)
d) Exhibit adaptability, initiative, and responsibility
e) Conduct work within scope of education, training, and ability
f) Adhere to clinical rules and regulations
g) Are adept at resume writing, interviewing techniques, and follow-up

3. Communication
Graduates:
a) Practice attentiveness
b) Are impartial and empathetic with patients
c) Serve as liaison between lab, physician and other allied health professionals
d) Practice telephone techniques
e) Perform effective interviewing skills
f) Use correct medical terminology
g) Receive, organize, prioritize, and transmit information expediently
h) Use correct grammar, spelling and formatting techniques in written communications
i) Perform entry-level computer skills

4. Medical Law and Ethics
a. HIPAA regulations/patient confidentiality
b. OSHA regulations
c. Legal and ethical implications in the laboratory
d. Chain of custody

Graduates will:
a. Demonstrate an understanding of Adhere to all HIPAA compliance rules and regulations
b. Complete chain of custody form for specimen
c. Be Are-cognizant of ethical boundaries in the field of medical laboratory technology
d. Demonstrate an understanding of Adhere to OSHA compliance rules and regulations

5. Anatomy and Physiology
a. Introduction to anatomy and physiology
b. Body systems:
Graduates will:

a. Demonstrate understanding of identify structures and functions of all body systems.

b. Identify anatomical structures as they relate to laboratory testing procedures in all body systems.

c. Identify common disorders affecting all body systems and those laboratory tests used to diagnose disorders.

d. Identify laboratory tests used to diagnose disorders.

64. General Chemistry

a. Introduction to chemistry (organic and inorganic)

b. Automated chemistry procedures

1) Spectrophotometry

2) Color reactions

Graduates will:

a. Understand inorganic and organic chemical reactions.

b. Understand clinical methodologies reactions performed by automated chemistry analyzers.

c. Calculate clinical results using standard curves.

75. Urinalysis - Body Fluids

a. Urinalysis physical, chemical and microscopic examinations

b. Gastric analysis

c. Synovial fluid

d. Pleural fluid

e. Spinal fluid

f. Other body fluids

Graduates will:

a. Perform urinalysis procedures and gastric analysis.

1) Collect specimens and perform studies

2) Identify physical, chemical, and microscopic properties.

b. Perform procedures for analysis of synovial, pleural, and spinal fluids.

c. Perform procedures for analysis of other relevant body fluids.

86. Hematology

a. Manual cell counts
b. Hematocrits  
c. Automated cell counts  
d. Cellular morphology and differentials  
e. Sedimentation rates  
f. Various hematology stains  
g. Coagulation  
   1. Protime/INR  
   2. Fibrinogen  
   3. Activated partial thromboplastin time (PTT)  
   4. Factor assays  
   5. D-Dimer assays  
   6. Bleeding times  
h. Blood culture  

Graduates will:  
a. Perform procedures for hematology including:  
   1) Hemoglobin and hematocrit  
   2) RBC and WBC counts and (platelet counts)  
   3) Blood smears and differentials  
   4) Erythrocyte sedimentation rates  
   5) Reticulocyte counts  
b. Perform specimen collection  
c. Perform routine venipuncture and dermal puncture  
d. Perform special procedures
b. Demonstrate an understanding of bone marrow slide evaluation and LAP scores  
c e. Perform coagulation procedures (PT, PTT) to include:  
   1. Prothrombin time (PT)/INR  
   2. Fibrinogen  
   3. Activated partial thromboplastin time (PTT)  
   4. Factor assays  
   5. D-Dimer assays  

97. Immunohematology  
a. ABO & Rh blood group systems  
b. Other major blood groups and antibody screening  
c. Compatibility testing  
d. Transfusion medicine  
e. Prenatal and new born screening  

Graduates will:  
1. Perform procedures for immunohematology utilizing precipitation and agglutination including:  
   1.) Selected test procedures for immunology and serology  
   2.) Titering and dilutions  
      1) ABO & Rh blood group systems  
      2) Antibody screening  
      3) Compatibility testing  
      4) Prenatal and new born screening
2. Demonstrate an understanding of:
   1) Antibody identification and titer
   2) Other major blood groups
   3) Component preparation
   4) Fetal maternal considerations
   5) Donor eligibility, collection and processing

108. Microbiology
   a. Bacteriology
      1) Culture and identification
      2) Antibiotic sensitivity testing
   b. Parasitology
   c. Mycology
   d. Virology

Graduates will:
   a. Perform staining techniques
      1) Gram
      2) Acid fast
      3) Negative
      4) Variations
   b. Select and inoculate appropriate culture media
   c. Select appropriate incubation techniques
   d. Perform Identification of normal flora versus pathogenic growth
   e. Use multi-test methods of ID
   f. Differentiate serological ID methods
   g. Perform phage typing
   h. Perform phage typing

119. Serology
   a. Basic immunologic mechanisms
   b. Theory and practice of serologic procedures
      1. RPR
      2. VDRL
      3. Rubella
      4. Mono
      5. Fluorescent techniques
      6. Serologic dilutions/titers
      7. Other serologic procedures
Graduates will:
   a. Understand basic immunologic mechanisms
   b. Perform serological testing procedures including:
      1) RPR
      2) VDRL
      3) Rubella
      4) Monospot
      5) HCG
      6) RF
      7) Fluorescent techniques
   c. Perform serological dilution titers
   d. Demonstrate an understanding of selected test procedures for immunology and serology including: VDRL, Rubella and Fluorescent techniques

1210. Clinical Chemistry
   a. Automated principles
   b. Acquisition and application of laboratory data
   c. Analytes
      1. Proteins
      2. Enzymes
      3. Carbohydrates/glucose
      4. Lipids/lipoproteins
      5. Vitamins/hormones
      6. Trace elements
      7. Electrolytes, blood gas analysis and acid—base balance
      8. Therapeutic drug monitoring
      9. Toxicology
     10. Electrolytes
     11. Heme compounds
     12. Non-protein nitrogen compounds
     13. Point of care
     14. Blood gases
     15. Quality control/quality assurance program

Graduates will:
   eg. Perform specific analyte testing including:
      1. Enzymes
      2. glucose
      3. Lipids/lipoproteins
      4. Electrolytes
      5. Therapeutic drug monitoring
      6. BUN and creatininne

ab. Demonstrate an understanding of principles and procedures for chemical analysis Perform routine blood chemistries
   1) Principles and procedures for chemistry analyzers
   2) Electrolytes
bc. Recognize normal values and indications for blood and body fluid analytes. Demonstrate an understanding of components of metabolic panels/profiles.

1311. Quality Assurance Control
   a. Importance of quality control
   b. Means of tracking
      1. Terms
      2. Levy Jennings charts
      3. Laboratory statistics

Graduates will:
   a. Understand the use and importance of Document and evaluate quality control in the laboratory procedures
   b. Utilize Levy Jennings charts and statistical analysis to track quality control Document corrective action procedures related to “out of control” results
   c. Troubleshoot “out of control” results Perform instrument calibration
   d. Demonstrate knowledge and understanding of:
      1. Utilizing Levy Jennings charts and Westgard Rules to perform statistical analysis
      2. Reference ranges
      3. Proficiency testing

14. Special Laboratory Procedures
   Overview of histology, cytology and other special laboratory procedures

Graduates:
   Apply basic concepts of histology, cytology and other special laboratory procedures

1512. Specimen Collection
   a. Routine venipunctures
   b. Special procedures
   c. Dermal punctures

Graduates will:
   a. Perform routine venipunctures
   b. Perform dermal punctures
   c. Perform special blood cultures
   d. Demonstrate an understand of:
      1. Instructing patients in urine, stool, and semen collection procedures
      2. Special collection procedures including: Forensic testing, sweat chloride, paternity testing and PKU.

1513. Career Development
   a. Instruction regarding internship rules and regulations
   b. Job search, professional development and success
   c. Goal setting, time management, employment opportunities
   d. Resume writing, interviewing techniques and follow-up
Graduates will:
   a. Understand externship rules and regulations
   b. Understand the importance of passing national certification exam and holding membership in a professional organization
   c. Set goals, manage time and search for employment
   d. Write a resume and interview for job

MLT.A.2. An externship and/or internal - clinical experience is required for completion of the program.

The following is considered in choosing, placing and maintaining clinical site affiliations:

(a) Assignment
   The program provides a clinical laboratory experience for the students with an approved laboratory, and the students' progress is evaluated through a formal procedure. Clinical externship sites include placement at a facility that performs various types of activities that will expose the student to the necessary skills required of the profession.

All approved laboratory externship experience credited toward certification is in a laboratory that examines materials derived from the human body and is in a:

   i. clinical laboratory (a) directed by a person holding an earned doctorate degree in one of the sciences, or (b) approved for service to patients under "Conditions for Coverage of Services of Independent Laboratories" under Medicare; or
   ii. research laboratory (a) operated by an accredited college or university (b) directed by the holder of an earned doctorate degree; or
   iii. hospital laboratory accredited by the (a) Joint Commission on Accreditation of Health Organizations (b) Commission of Hospitals of the American Osteopathic Association or (c) College of American Pathologists.

(b) Activities
   1. Students are oriented to the facility and the daily routine of the facility.
   2. Students initially observe activities and procedures and then begin perform tasks and procedures.
   3. The laboratory externship experience covers the major sections of clinical laboratory testing including; chemistry, hematology/coagulation, urinalysis, serology, immunohematology, and microbiology.
   4. An externship includes assisting clinical staff members with daily tasks, while under the supervision of staff.
   5. As their externship experience progresses, they move into more advanced tasks and procedures. Record of student competencies case logs/check lists are maintained to ensure a variety of tasks performed.

(c) Supervision
   Program supervision for this portion of the program may be performed by program director or clinical coordinator.
   (no additional requirements beyond Chapter V.B.4.c. & MLT.B.2.a.)

(d) Requirements for completion
   (no additional requirements beyond CH V)
SECTION B – Program Supervision, Faculty, and Consultation

Subsection 1 – Supervision

MLT.B.1. The program supervisor is credentialed and experienced in the field.

The program supervisor holds a credential from a nationally recognized and accredited agency as a medical technologist or a clinical laboratory scientist and at a minimum holds a bachelor’s degree in the sciences. The program supervisor has five years of practical experience in the field or a closely related field.

The program supervisor holds a nationally recognized generalist certification and holds, at a minimum, a bachelor’s degree in the sciences. The program supervisor has five years of practical experience in the field or a closely related field, and has knowledge of education methods and administration.

Subsection 2 – Faculty and Consultation

MLT.B.2.a. Faculty formal education/training and experience support the goals of the program.

Faculty designated by the program must demonstrate knowledge and proficiency in their content areas and the ability to teach effectively at the appropriate level. Faculty hold a credential from a nationally recognized and accredited agency as a medical laboratory technologist or technician with a minimum of two years of practical experience of the subject area.

The faculty must participate in teaching courses, supervising applied laboratory learning experiences, evaluating student achievement, developing curriculum, formulating policy and procedure, and evaluating program effectiveness.

MLT.B.2.b. Faculty size/numbers support the goals of the program.

Faculty/student ratio does not exceed program specific requirements. Student to instructor ratio in the laboratory does not exceed 10:1.

The program limits class size to ensure instruction without risking student or faculty safety.

MLT.B.2.c. A program must be served by an individual consultant or advisory board of program-related specialists to assist administration and faculty in fulfilling stated educational objectives.

The program’s advisory board must include a graduate and current practitioner.

The advisory committee is composed of individuals from the community of interest (i.e. pathologists, other physicians, scientific consultants, academic professionals, administrators, practicing clinical laboratory scientists/medical technologists, practicing clinical laboratory technicians/medical laboratory technicians) who have knowledge of clinical laboratory science education.
SECTION C – Educational Facilities and Resources

MLT.C.1.a. Laboratory facilities are fully operational and readily available to accommodate all enrolled students.

1. Laboratory areas are of a size to accommodate students, faculty and equipment during instruction.
2. Equipment and instruments are available in quantity and quality to accommodate student during instruction.
3. Faculty/student ratio does not exceed program specific requirements. Student to instructor ratio in the laboratory does not exceed 10:1.

MLT.C.1.b. Instruments and equipment for instruction and experience are available in the program’s laboratory facility.

MLT.C.1.c. The institution’s laboratory facilities are available for students to develop required skills with faculty supervision.
APPENDIX I
FEES

Annual Sustaining Fees

Institutional Accreditation:

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Programmatic Accreditation
(Medical Assistant, Medical Laboratory Technology, Surgical Technology):

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