The University of Nebraska Medical Center Medical Laboratory Science Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The 11+ month program leads to a baccalaureate of science degree in Medical Laboratory Science and eligibility for national certification.

To contact NAACLS, please use the contact information below:

National Accrediting Agency for Clinical Laboratory Sciences
5600 N River Road, Suite 720
Rosemont, IL 60018
Phone: (773) 714-8880
PURPOSE: The responsibilities of this committee are to review and make recommendations on matters related to student affairs.

MEMBERSHIP: The committee shall include:

1. A chairperson
2. Committee members

DUTIES OF CHAIRPERSON:
1. Preside at all meetings.
2. Delegate responsibilities as appropriate.
3. Report actions and recommendations of committee to the MLS Program Director.
4. Other duties as assigned.

DUTIES OF ADMISSIONS COMMITTEE:
1. Recommend policies on admission.
2. Receive and process applications from prospective students.
3. Make recommendations to the MLS Program Director concerning action on each application received.
4. Recommend policies and procedures related to:
   a. Student Progress
   b. Scholarships
   c. Dress Code
   d. Student Health
   e. Student Employment
   f. Grievances
   g. Equivalency Examinations
5. Recommend candidates eligible to graduate.
6. Recommend candidates for graduation with honors.
7. Other duties as assigned.
PURPOSE: The Medical Laboratory Science Program shall maintain an admission policy which ensures that:

1. The most qualified applicants are selected to fill the student positions in the Medical Laboratory Science Program.
2. Admission to the Medical Laboratory Science Program shall not be denied any person on the basis of race, color, gender, sexual orientation, national origin, age, handicap, marital status, religion, or veteran status.

APPLICATION:

Each applicant must submit the University of Nebraska Medical Center on-line application form for the Medical Laboratory Science Program.

The Admissions Committee shall consider each applicant who has completed the on-line application form by the published deadline. A qualified applicant, who submits their application form after the published deadline, may be considered for an alternate appointment if a position becomes available. A completed application file requires:

1. **The on-line application form including an application fee.**
2. **Official college transcript from each school attended:** Transcripts must be updated as appropriate. It is the applicant’s responsibility to request that an official transcript be forwarded to UNMC.
3. **References:** It is the responsibility of the applicant to list two persons to be contacted to serve as references.

Each applicant will be notified of any application materials that have not been received by the College of Allied Health Professions Academic and Student Affairs Office.
STUDENT SELECTION: The most qualified applicants will be selected to fill the positions in the Medical Laboratory Science Program. In the event of equally qualified applicants, preference will be given to the University of Nebraska students and Nebraska residents. The following criteria shall be used for student selection:

**Non-Academic Criteria:** Each applicant shall be evaluated to determine whether they possess the desirable qualities predicting success in the Medical Laboratory Science profession. Desirable qualities include personal integrity, interest and ability in science and mathematics, manual dexterity, attention to detail, and the ability to work cooperatively with others. Evaluation of these qualities shall be made by:

1. Evaluation of references
2. Personal interview
3. Assessment of written communication skills

**Academic Qualifications:**

**Minimum Criteria:** Cumulative grade point average and the science/math grade point average shall be calculated. Applicants must meet the following criteria to be considered for acceptance into the program:

1. Cumulative GPA of at least 2.50 based on a 4.00 point scale
2. Science and mathematics GPA of at least 2.50
3. Demonstrated capability in upper division science courses

**COLLEGE OR UNIVERSITY REQUIREMENTS:**

It is expected that all required courses be taken for a letter grade unless the student receives specific approval from the Admissions Committee in the Medical Laboratory Science Program to take a required course Pass/Fail.
COURSE REQUIREMENTS:

1. At least 77 semester hours (or equivalent quarter hours) from a regionally-accredited college or university are required. A maximum of 66 semester credit hours (or equivalent quarter hours) can be accepted from a community college. A total of 11 semester hours (or equivalent quarter hours) must be completed at a 4-year regionally-accredited college or university. Upper level science courses taken at a 4-year institution are strongly recommended.

2. A minimum of 14 semester hours or 21 quarter hours of Chemistry are required. This must include:
   a. Two upper level (200 level or above) courses
   b. Upper level chemistry courses may include Biochemistry, Organic Chemistry I and II or Analytical Chemistry. Biochemistry with a lab is strongly recommended.

3. A minimum of 16 semester hours or 24 quarter hours of Biological Sciences are required. This must include courses in:
   a. Microbiology (with lab preferred)
   b. Immunology
   c. Genetics or Molecular Biology
   The remaining biology pre-requisite hours can be satisfied with courses such as General Biology, Physiology, Introduction to Hematology, Pathogenic Microbiology, or Parasitology.

4. Mathematics (3 semester hours) - statistics strongly recommended

5. English composition (3 semester hours)

6. To satisfy the remaining required semester hours, courses recommended include research methodology, database management, and ethics.

The MLS Program will not accept AP, CLEP, or DANTES credit toward the English Composition, Mathematics, or Science requirements. Any AP, CLEP, or DANTES credit earned in these categories will be used as elective prerequisite credit only.

UPDATING THE PREREQUISITES:
The Admissions Committee recognizes the significance of the preclinical academic preparation in correlation to the student's successful performance during the clinical year. Therefore, it is essential that the preparation reflect current information. An applicant who has completed the academic prerequisites more than five years previous to admission will be evaluated by the Admissions Committee to determine an acceptable means of updating the prerequisites. The applicant may be asked to complete one or more of the following:

1. Successful completion of an advanced level chemistry course such as Biochemistry
2. Successful completion of an acceptable course in Microbiology, Immunology, Genetics or Molecular Biology
3. Current work experience in the field(s) of Biochemistry, Microbiology, Molecular Diagnostics or Immunology acceptable to the Admissions Committee
FOREIGN APPLICANT REQUIREMENTS:

1. All students who took courses required for admission into the UNMC MLS Program, or who obtained a Certificate or Degree from a foreign institution must have the transcript evaluated by a Board of Certification-approved evaluation organization available from the ASCP website (www.ascp.org) and meet CAHP’s foreign transcript evaluation requirements.

    See: http://www.unmc.edu/alliedhealth/admissions/foreign-coursework.html

2. All students whose native language is not English must meet CAHP’s and the MLS Program’s English proficiency requirements.

    See: http://www.unmc.edu/alliedhealth/admissions/english-proficiency.html

NOTIFICATION OF SELECTION:

The Admissions Committee will review completed applications. They will then make one of the following recommendations to the Combined Program Committee on each applicant:

1. ACCEPTANCE to the incoming class
2. ALTERNATE to be considered should a position become available
3. HOLD for current grades/updated transcripts
4. NOT SELECTED for admission into the Program

The UNMC CAHP ASA Office shall notify each applicant via letter of the status of their application.

Applicants receiving acceptance letters must return their signed Essential Requirement Forms and a non-refundable deposit.

Any applicant who declines their position must reapply if they desire to be considered for admission to succeeding classes. No positions will be held/reserved in future classes.
PURPOSE: To identify the essential requirements for students enrolled in the UNMC Clinical Laboratory Science Program

PROCEDURE:

1. The information in the following document entitled Essential Requirements will be published on the official program web site.

2. A copy of the essential requirements for the Medical Laboratory Science Program is included with all acceptance letters. Students who accept positions in the Medical Laboratory Science Program are required to read, sign, and return the document as indicated.

3. Any student who wants a specific accommodation for a disability or wishes to seek information about the process must submit a written request to the Coordinator of Services for Students with Disabilities.

4. Following this, all requests are processed under the procedures established through the Disability Services Office, Student Counseling Center, at UNMC.
Introduction
The Bachelor of Science Degree in Medical Laboratory Science is recognized as requiring the acquisition of general knowledge and basic technical performance skills in all areas of Medical Laboratory Science, otherwise known as the clinical laboratory science profession.

Policy
The Faculty in the Medical Laboratory Science Program has a responsibility for the welfare of the patients treated or otherwise affected by students enrolled in the program, as well as for the welfare of students in the Program. To fulfill this responsibility, the program has established minimum essential requirements that must be met, with or without reasonable accommodation, in order to participate in the program and graduate. Discrimination is prohibited on the basis of race, color, sex, national origin, age, disability, marital status, sexual orientation, religion or veteran status.

Program
Admission and retention decisions for Medical Laboratory Science are based not only on prior satisfactory academic achievement, but also on non-academic factors which serve to insure the candidate can complete the essential requirements of the academic program for graduation. Essential requirements, as distinguished from academic standards, refer to those cognitive, physical, and behavioral abilities that are necessary for satisfactory completion of all aspects of the curriculum, and for the development of professional attributes required by the faculty of each student at graduation.

The University of Nebraska Medical Laboratory Science Program curriculum requires essential abilities in information acquisition. The student must have the ability to master information presented in course work in the form of lectures, written material, and images. Additionally, the student must have the cognitive abilities necessary to master relevant content in basic science and clinical courses at a level deemed appropriate by the faculty.

The student must be able to perform patient testing safely and accurately. He/she must be able to distinguish and identify objects both macroscopically and microscopically.
The student must have sufficient upper body muscle coordination and adequate dexterity to handle body fluid specimens, biohazards, chemical hazards and instruments safely in order to prevent harm to self or others. He/she must be able to perform delicate manipulations on specimens, instruments and equipment (such as calibrated pipettes) sufficient to meet specifications for accuracy in diagnostic testing. He/she must be able to lift and move objects, e.g., load individual tubes in an analyzer and move test tube racks from one bench to another. He/she must have fine motor control skills to carry out technical procedures, such as, isolating bacteria by smoothly moving a loop (a 6-inch wire with a looped end) over the surface of an agar (gel) culture plate without tearing the surface of the agar. The student must have sufficient touch discrimination to discern veins in order to perform venipunctures.

The student must be able and willing to work with blood and with organisms that may be infectious. He/she must be able to work safely with a wide variety of chemical reagents.

Approximately 75% of each day is spent standing or walking and 25% is spent sitting in an indoor setting. Lifting of up to 50 pounds of equipment or supplies is required. Frequent interaction with computer terminals and laboratory equipment is necessary, requiring interpretation of visual presentation on screen, repetitive hand movements and fine manipulation.

The student must possess the emotional stability required for full utilization of his/her intellectual abilities. He/she must be able to work accurately and safely under stress, e.g., work under time constraints; read and record numbers accurately; perform repetitive tasks; concentrate in distracting situations; and make subjective evaluations and decisions where mistakes may have a high impact on patient care. He/she must be able to adapt to changing environments and be able to prioritize tasks.

The student must be able to communicate effectively in verbal and written English in order to obtain and transmit information to patients and members of the health care team. The appropriate communication may also rely on the student’s ability to make a correct judgment in seeking supervisory help and consultation in a timely manner.
(Continued):

The student must possess attributes which include integrity, responsibility, and tolerance. He/she must show respect for self and others, work independently as well as with others, and project an image of professionalism.

These standards identify the requirements for admission, retention and graduation from the program. It is the responsibility of the student with disabilities to request those accommodations that he/she feels are reasonable and are needed to execute the essential functions described.

Students who wish to obtain further information regarding disability accommodations should contact:

Services for Students with Disabilities
Bennett Hall, Room 6001
University of Nebraska Medical Center
984255 Nebraska Medical Center
Omaha, NE 68198-4255
Phone: 402-559-5553
PURPOSE: To define the attendance requirements for CLS students.

REQUIREMENTS:

Each student is required to attend all classes, lectures, case study sessions, and clinical experiences. There are no allotted days for sick leave or absences. All didactic and clinical work must be completed before grades can be assigned. This may necessitate extra days being made up in the clinical department or at the end of the year. If a large number of sick days are accrued in one rotation block, the entire rotation may have to be rescheduled at a later date to complete the required material.

1. Failure to meet the programs attendance requirements may result in corrective action, including academic probation, dismissal, or a required leave of absence.

2. Absences due to special circumstances (e.g., funerals, weddings, etc.) must be approved by the department instructor and program director.
PURPOSE: To establish guidelines for an extended leave of absence (LOA) required by or approved by the Program Director.

LEAVE OF ABSENCE:

A leave of absence for a limited time may, under exceptional circumstances, be required by or approved by the program director. Any such leave of absence shall be solely within the discretion of the program administration, and ultimately the Combined Program Committee, based upon the circumstances, and evaluated on a case-by-case basis.

1. Reasons for the LOA may include, but are not limited to, excessive absences due to health, personal, or family circumstances (see Policy SA 3.0). Proper medical documentation will be required if appropriate.

2. A required LOA halts progression within the curriculum while maintaining a class position, but does not excuse the student from any course requirements.

3. The student is responsible for initiating determination of the financial consequences of a required leave of absence. Students should review financial arrangements with the Business Office and the Office of Financial Aid.

4. Students who are placed on a LOA are responsible for notifying the program director, in writing, of their intention to return to classes no later than the date specified by the director. Failure to do so will result in forfeiture of the student’s place in the class, and dismissal from the program. Re-entry into the CLS program would require reapplication through the usual admissions process, with no guarantee of re-admission.

5. When a LOA is required, the program director and program faculty may recommend or require that the student meet additional conditions (e.g. documentation of remedial academic work) prior to resuming enrollment in the program. Proper medical documentation will be required, if appropriate, before the student is allowed to return from the LOA.
Leave of Absence continued:

6. The student must resume enrollment in the program within the following academic year. Upon re-enrollment following a LOA, the student will be subject to all policies and curriculum requirements which pertain to the class he or she is joining, and the student may be placed on academic probation during the semester of return.

7. The CLS program will grant no more than a single LOA to a student within any 12-month period.

8. All didactic and clinical work must be completed before grades can be assigned.
PURPOSE: To delineate financial responsibilities and privileges for students enrolled in the Medical Laboratory Science Program.

RESPONSIBILITIES AND PRIVILEGES:

1. Students shall pay the tuition and fees required by the University of Nebraska Medical Center (UNMC).

2. All students are eligible to be considered for scholarship awards, loans, and grants available through the Financial Aid office at the University of Nebraska Medical Center.

3. No program shall offer scholarships or other sources of funds unless approved by the Combined Program Committee.

4. A student who withdraws from the Medical Laboratory Science Program during any term for which they are registered is entitled to claim a refund according to the current schedule.

5. All students are enrolled as seniors in the University of Nebraska Medical Center and are eligible for all benefits and rights of UNMC students.

6. Appropriate financial records will be maintained on each student by the University of Nebraska Medical Center.

7. The current refund policy is published on the UNMC website.
PURPOSE: To clearly delineate the process of awarding scholarships to students enrolled in the Medical Laboratory Science Program.

MEMBERSHIP: The Medical Laboratory Science Program Scholarship Committee consists of the following members:

1. Program Director
2. Associate Program Director
3. Education Coordinator

PROCEDURE:
The UNMC Financial Aid Office sends the medical laboratory science scholarship committee the following information: (1) scholarship resource list, (2) a scholarship application list for medical laboratory science students with the cumulative GPAs in descending order as of fall semester grades prior to enrollment, and (3) a description sheet for codes.

After careful examination of the scholarship application list and the scholarship resource list, the scholarship selection is as follows:

1. Regents scholarships are awarded solely on the basis of academic excellence (GPA based on all pre-clinical hours attempted) and Nebraska residency.

2. The remaining scholarships are awarded on the basis of academic excellence (GPA based on all pre-clinical hours attempted) and financial need, while abiding by all of the specific stipulations associated with each scholarship.

3. After the scholarship funds are awarded, the information is sent to the UNMC Financial Aid Office to be reviewed for compliance with UNMC scholarship guidelines.

4. Scholarship notification letters are sent to the respective students following approval from the Financial Aid Office.

5. If additional scholarships become available to the students, this committee will (1) notify the students as appropriate, and/or (2) will nominate students according to guidelines of respective scholarships.
PURPOSE: To describe the policy for dealing with students who do not demonstrate professional behavior.

PROCEDURE:

1. Professionalism is expected in all situations at all times. Clinical course grades require successful completion of all components, as stated in the Professional Behaviors evaluation, in order to meet minimum requirements for a passing grade (see Policy CU 6.0). This evaluation includes assessment of professional ethics/integrity, dependability/initiative/responsibility, and interpersonal skills/communication.

2. During lecture presentations, case study sessions, working with instructors and laboratorians and in any situation representing the CLS Program, the CLS student must demonstrate professionalism towards lecturers, instructors, co-workers, fellow students, preceptors and proctors, program officials, and other health care professionals.

3. Non-professional behavior is demonstrated by being disrespectful and/or disrupting class, and will not be tolerated. Disrespectful and disruptive behaviors include, but are not limited to the following:
   - Use of cell phones other than in an emergency
   - Disruptive and inattentive actions during presentations
   - Improper use of computers
   - Confrontational discussions/communications

4. If a student is exhibiting non-professional behavior, she/he will be asked to terminate the inappropriate communication or behavior and/or may be asked to leave the session/clinical area. An instructor will complete the Non-professional Behavior documentation form, and ask that it be signed or acknowledged by the student. The Non-professional Behavior Form will initiate the instructor’s completion of the Professional Behaviors Evaluation. Both forms then become a part of the student’s file.

5. Reports of unprofessional behavior may lead to a rating of “Not Acceptable” on the Professional Behaviors Evaluation, which in turn may lead to probation (see Policy SA 10.0).
PURPOSE: To ensure each student is attired in a manner that complies with safety requirements and will present a professional appearance to the patient, visitor, medical staff, and hospital personnel.

AFFILIATED HOSPITAL GUIDELINES:

Each student shall comply with the dress code, identification badge policy, and safety codes of the affiliated hospital to which they are assigned. The dress code requires that each student be clean and well groomed. Scrubs are acceptable if approved by the hospital laboratory.

ATTIRE:

A student may choose either of the following options:

1. Appropriate street wear covered by a laboratory coat that meets all regulatory requirements. Appropriate street wear includes conservative dress slacks, shirts, pantsuits or dresses. Low-heeled, closed toed shoes with hose or socks are required.

   Unacceptable forms of dress include denim or denim-like pants or skirts, shorts, T-shirts, low necklines, bare backs, and sandals.

2. Scrubs covered by a laboratory coat that meets all regulatory requirements. Low-heeled, closed toed shoes with hose or socks are required.

APPEARANCE:

Personal cleanliness is required of those who work in hospitals. Fresh, clean clothes and shoes are essential. Hair shall be neatly groomed and secured so that it does not fall freely when moving the head. Long, loose scarves shall not be used to secure hair. All cosmetics, perfume, after shave lotion, and jewelry shall be conservative.
PURPOSE: To establish guidelines for health care, hospitalization, and safety for students enrolled in the Medical Laboratory Science Program.

GUIDELINES:

1. Each Medical Laboratory Science Program shall provide a system of emergency out-patient health care for students.

2. Each student shall be required to pay the current University of Nebraska Medical Center fees for outpatient care. Outpatient services covered are listed on the UNMC website.

3. Each student shall be required to have hospitalization insurance. A group plan is available through the University of Nebraska Medical Center for UNMC students. Students enrolled at UNMC will be required to participate in this plan unless documentation is submitted showing the student is adequately covered by another plan.

4. Students shall be instructed in safe practices and standard precautions in the clinical laboratory. Students are required to comply with laboratory safety policies and procedures.

5. Each student must provide a medical history and evidence of vaccination or immunity as required by the University of Nebraska Medical Center.

6. All UNMC students should be considered to be at high risk for exposure to Hepatitis B and other blood-borne pathogens.
PURPOSE: To establish guidelines for student employment.

STIPEND: Medical Laboratory Science Program students shall not receive stipends for any portion of the required clinical work or activities in the Clinical Laboratory Science Program.

EMPLOYMENT:

Medical Laboratory Science students may work additional hours outside the normal educational program for remuneration provided the student continues to maintain a satisfactory performance level in the educational program.

The student's work schedule shall not interfere with any class or clinical assignment as scheduled in the Medical Laboratory Science Program.
PURPOSE: To state the policy on awarding the Bachelor of Science degree in Medical Laboratory Science.

AWARDING THE DEGREE:

1. Completion of the MLS program requires a successful completion of each course. The requirements for successful completion of each course are defined in the respective course syllabus.

2. Upon successful completion of the Medical Laboratory Science Program, the student will be eligible to receive a Bachelor of Science Degree in Medical Laboratory Science from the University of Nebraska Medical Center or the equivalent degree from the academic affiliate.

3. Granting of the degree is not contingent upon the student passing an external certification exam.

4. Requirements for graduation with honors are described in Policy SA 9.1.
PURPOSE: To describe guidelines for conferring degrees with Honors

REQUIREMENTS:
In accordance with the UNMC College of Allied Health Professions, students may be recommended for graduating with honors according to the following:

The student must have entered the Program with a minimum cumulative grade point average of 3.5 and must currently have a cumulative, combined grade point average at 3.5 or above.

Three categories of honors will be awarded:

- Highest Distinction
- High Distinction
- Distinction

No more than 20% of each graduating class will be eligible for graduation with honors. Within this 20%, the following percentages of students may receive the indicated designations for honors:

- 2% Highest Distinction
- 8% High Distinction
- 10% Distinction

Program administration evaluates the academic resume of each student expected to qualify for graduation with honors, and forwards the list of recommended students to the School of Allied Health Professions for approval.
PURPOSE: To describe the guidelines for probation for students enrolled in the Medical Laboratory Science Program.

ACADEMIC GRADES: Academic grades are based on evaluation of professional behaviors, knowledge and theory, and technical competencies. A program may recommend probation for a student based on failure in any one of these three domains of learning.

ACADEMIC SCHEDULE: In the academic schedule of the Medical Laboratory Science Program, students have completed first semester student laboratory courses by August of each year, clinical and didactic courses by December of each year, and second semester clinical and didactic courses by the scheduled last day of the program.

ACADEMIC PROBATION: A student may be placed on probation for:

1. Failure to maintain the minimum requirements in each didactic course as published in the respective course syllabus.
2. Failure to maintain the minimum requirements in each clinical course as published in the respective course syllabus.

GRADING SYSTEM: The course evaluation may consist of quizzes, unit examinations, technical evaluations, and lab practical examinations. The student's final grade shall include an evaluation of the professional behaviors, theoretical aspects, and the technical components, if applicable.

Evaluation of professional behaviors shall be structured so the faculty can assess behavioral and professional traits. Results of this evaluation are used in counseling for professional development, as well as in grading of courses.

Grade Requirements: Satisfactory completion of a course requires the following:

1. Achieving >70% in the theory and/or technical components prior to any remedial activities in Student Lab, Rotation I, or Rotation II in a course according to the requirements described in the respective course syllabus/guidelines.
2. Meeting all requirements stipulated in course syllabus.
NON-ACADEMIC PROBATION: A student may be placed on probation for failure to comply with the University, affiliated hospital, and/or laboratory regulations or policies.

NOTIFICATION: A student will be notified in a conference with a program official (followed by a written memorandum) that they have been placed on probation. The conference and subsequent memoranda should indicate the reasons for probation and the plan recommended to the student for correction of deficiencies.

APPEAL: A student has the right to appeal probation by using the approved grievance procedures established by the University of Nebraska Medical Center. The student is entitled to see their personal file and make copies of any documents they consider important.

REMOVAL OF PROBATION: Probationary status may be rescinded when the deficiencies are removed to the satisfaction of the program officials.
PURPOSE: To describe guidelines for dismissal of students enrolled in the Medical Laboratory Science Program.

ACADEMIC GRADES: Academic grades are based on evaluation of professional behaviors, knowledge and theory, and technical competencies. A program may recommend dismissal of a student based on failure in any one of these three domains of learning.

ACADEMIC DISMISSAL: A student may be subject to dismissal for:

1. Failure to achieve 70% in the theory and/or technical components prior to any remedial activities in Student Lab, Rotation I, or Rotation II in two courses according to the requirements described in the respective course syllabus/guidelines.

2. Dishonesty on a written examination, a laboratory test, or laboratory report.

3. Failure to meet acceptable professional behaviors requirements.

NON-ACADEMIC DISMISSAL: Failure to comply with University, affiliated hospital, or laboratory regulations or policies may be grounds for immediate dismissal.

NOTIFICATION: A student will be notified in a conference with program officials that a recommendation for dismissal has been forwarded to the Executive Associate Dean of the College of Allied Health Professions. The Executive Associate Dean will then notify the student of his/her dismissal in writing, sent by certified mail. A copy will be forwarded to the MLS Program Director.

APPEAL: A student has the right to appeal dismissal action by using the approved grievance procedures established by the University of Nebraska Medical Center. A student is entitled to see their personal file and make copies of any documents they consider important (see Policy SA 12.0). (see UNMC Student Handbook, p.58 at http://www.unmc.edu/studentservices/documents/Handbook.pdf).
PURPOSE: To describe the process for handling a grievance and/or appeal.

GRIEVANCE PROCESS:

A medical laboratory science student having a complaint or grievance should endeavor to resolve the problem using the following sequence of administrative levels:

1. Person involved in problem or situation
2. Person with major educational responsibilities in that area or department
3. Program Director
4. Program Medical Director
5. Executive Associate Dean of the College of Allied Health Professions (CAHP)

APPEALS PROCESS:

Academic policies of the College of Allied Health Professions address the student appeal process. If a MLS appeal is related to a grade or academic progress evaluation, it will be heard by the CAHP Faculty-Student Appeals Committee. If a matter is related to student discipline, it will be directed to the CAHP Discipline Hearing Board. These procedures assure that there is a mechanism for neutral evaluation. (see UNMC Student Handbook, p.58 at http://www.unmc.edu/studentservices/documents/Handbook.pdf).
PURPOSE: The responsibilities of this committee are to review and make recommendations on matters related to the curriculum.

MEMBERSHIP: The committee shall consist of:
1. A chair
2. Committee members

DUTIES OF CHAIR:

1. Preside at all meetings.
2. Assign areas of responsibility for implementing combined lectures and examinations.
3. Appoint subcommittees as required.
4. Report on committee activities to the MLS Program Director.
5. Communicate any significant curriculum changes to the CAHP Curriculum Committee.
6. Other duties as assigned.

DUTIES OF CURRICULUM COMMITTEE:

1. Provide leadership in the development, implementation, and evaluation of MLS curriculum:
2. Make recommendations regarding curriculum to the MLS Program Director.
3. Other duties as assigned.
PURPOSE: To describe course content and assign semester hour credit for courses included in the Medical Laboratory Science Program curriculum.

The following courses are included in the Clinical Laboratory Science curriculum:

**MLS 407 Clinical Laboratory Operations (2 credit hours)**
This course provides a basic introduction to the theory, practical application, technical performance and evaluation of laboratory skills specific to the practice of clinical laboratory science. Laboratory safety; microscopy; pipetting; general laboratory equipment; quality control; mathematics; phlebotomy; pre-analytic, analytic and post-analytic processes, including specimen collection, processing and transport to maintain test result integrity, will be addressed.

**MLS 408 Introduction to Clinical Hematology (2 credit hours)**
This course introduces the theory, practical application, technical performance and evaluation of hematological and hemostasis procedures. Correlation of laboratory data with the diagnosis of erythrocyte, leukocyte and bleeding/clotting disorders will be introduced.

**MLS 409 Introduction to Clinical Microbiology (2 credit hours)**
This course introduces the theory, practical application, technical performance and evaluation of procedures for isolation, identification and susceptibility testing of infectious disease organisms in humans. The course primarily focuses on bacteriology, but will include introductory coverage of parasitology, mycology and virology.

**MLS 410 Introduction to Clinical Chemistry and Urinalysis (1 credit hour)**
This course introduces the theory, practical application, technical performance and evaluation of basic laboratory skills and methods in clinical chemistry and urinalysis. The course focuses on the correlation of laboratory data with the diagnosis of renal conditions, but will include introductory coverage of carbohydrate, liver and protein conditions, as well as enzymes.

**MLS 411 Introduction to Clinical Immunohematology (1 credit hour)**
This course introduces the theory, practical application, technical performance and evaluation of immunohematology procedures required to provide compatible blood components for transfusion. Methods for collection, processing, storage and transfusion of blood and blood components will be presented. Immunohematology procedures that assist in the diagnosis and management of hemolytic conditions will be introduced.

**MLS 412 Clinical Laboratory Science Theory, Application and Correlation (5 credit hours)**
This course includes the application, evaluation and correlation of laboratory procedures used in the diagnosis and treatment of common disease states. Opportunities for building critical thinking, problem solving, leadership, oral communication, professionalism, and team work skills are provided in small group clinical case discussions.
MLS 413 Clinical Endocrinology and Toxicology (1 credit hour)
This course introduces the theory, practical application, and evaluation of clinical chemistry laboratory procedures. Correlation of clinical laboratory data with the diagnosis and treatment of endocrine disorders, toxicology disturbances and therapeutic drug monitoring is emphasized.

MLS 414 Clinical Chemistry and Urinalysis I (2 credit hours)
This course expands on the theory, practical application, and evaluation of basic laboratory procedures introduced in MLS 407 Clinical Laboratory Operations and MLS 410 Introduction to Clinical Chemistry and Urinalysis, with an emphasis on common automated methodologies used in clinical chemistry and urinalysis laboratories. This course will focus on the interpretation, evaluation and correlation of clinical laboratory data with the diagnosis and treatment monitoring of carbohydrate, renal, hepatic, protein, cardiac, lipid/lipoprotein, major and minor electrolyte, enzyme, pancreatic-gastrointestinal and acid-base disorders.

MLS 415 Clinical Chemistry and Urinalysis II (2 credit hours)
This course expands on the theory, practical application, and evaluation of laboratory procedures introduced in MLS 414 Clinical Chemistry and Urinalysis I and MLS 444 Clinical Core Laboratory Practicum I. Correlation of clinical laboratory data with the diagnosis and treatment monitoring of carbohydrate, renal, hepatic, cardiac, lipid/lipoprotein, protein, major and minor electrolyte, trace element, enzyme, pancreatic-gastrointestinal and acid-base disorders; tumor markers; and inborn errors of metabolism is emphasized.

MLS 416 Clinical Hematology I (2 credit hours)
This course expands on the theory, practical application, and evaluation of hematological and hemostasis procedures introduced in MLS 408 Introduction to Clinical Hematology and of basic laboratory skills in MLS 407 Clinical Laboratory Operations. The course primarily focuses on bacteriology, but will include coverage of parasitology, mycology and virology. Course content emphasizes the correlation of clinical laboratory data with the patient’s diagnosis and treatment.
Courses Continued:

**MLS 419 Clinical Microbiology II (2 credit hours)**
This course builds on the theory, practical application and evaluation of the procedures for isolation, identification and susceptibility testing of infectious disease organisms in humans introduced in MLS 418 Clinical Microbiology I and MLS 448 Clinical Microbiology Laboratory Practicum I. This course includes bacteriology, mycology, parasitology, and virology content, and will emphasize the correlation of clinical laboratory data with the patient’s diagnosis and treatment.

**MLS 420 Clinical Immunology and Molecular Diagnostics (2 credit hours)**
This course includes the theory, practical application, and evaluation of immunological components and infection disease serology. The principles and methodologies used in the assessment of immunologically related disorders, including hypersensitivity reactions, autoimmune, Immunoproliferative, immunodeficient disorders and infectious disease are included. The course emphasizes the correlation of clinical laboratory data with the patient's diagnosis and treatment. The theory and application of molecular diagnostic tools, such as polymerase chain reaction (PCR), nucleic acid probes, and microarrays are also addressed.

**MLS 422 Clinical Immunohematology I (2 credit hours)**
This course expands on the theory, practical application, and evaluation of immunohematology procedures introduced in MLS 411 Introduction to Clinical Immunohematology and of basic laboratory skills in MLS 407 Clinical Laboratory Operations. The primary focus will be on processes required to provide compatible blood components for transfusion. Processes for donor blood collection and blood component processing and storage will be discussed. Immunohematology procedures that assist in the diagnosis and management of hemolytic conditions will be addressed.

**MLS 423 Clinical Immunohematology II (2 credit hours)**
This course expands on the theory, practical application, and evaluation of immunohematology procedures presented in MLS 422 Clinical Immunohematology I and MLS 442 Clinical Immunohematology Laboratory Practicum I. There is an emphasis on the application of immunohematology procedures used for the resolution of complex immunohematology problems. Proper selection of immunohematology procedures that assist in the diagnosis and management of hemolytic conditions will be discussed. Concepts in patient blood management and the adverse effects of transfusion will be presented. Quality management as it applies to transfusion medicine will be addressed.

**MLS 430 Clinical Laboratory Management I (2 credit hours)**
This course introduces the theory, practical application and evaluation of laboratory management principles in healthcare, including safety, research, educational methodology, quality control, ethics, laboratory operations, point-of-care testing, scope of practice, and the job application process. Opportunities for building critical thinking, problem-solving, research, communication, professionalism, management and leadership skills are provided.
Courses Continued:

MLS 431 Clinical Laboratory Management II (3 credit hours)
This course builds on MLS 430 Clinical Laboratory Management I, and includes the theory, practical application and evaluation of laboratory management principles in compliance and regulatory issues, test utilization, human resource management, written and oral communication, method evaluation, educational methodology, professionalism, quality improvement and financial resource management. Opportunities for building critical thinking, problem-solving, team work, communication, professionalism, management and leadership skills are provided.

MLS 442 Clinical Immunohematology Laboratory Practicum I (1 credit hour)
This course provides practical application in a clinical laboratory setting for the technical performance and evaluation of clinical immunohematology procedures and preparation of blood components. Course content will include new skills and procedures, in addition to the skills and procedures presented in MLS 407 Clinical Laboratory Operations and MLS 411 Introduction to Clinical Immunohematology.

MLS 443 Clinical Immunohematology Laboratory Practicum II (1 credit hour)
This course provides practical application in a clinical laboratory setting for the technical performance and evaluation of clinical immunohematology procedures and preparation of blood components. Course content will include new skills procedures, in addition to the skills and procedures presented in MLS 442 Clinical Immunohematology Laboratory Practicum I.

MLS 444 Clinical Core Laboratory Practicum I (1 credit hour)
This course provides practical application in a clinical laboratory setting for the technical performance and evaluation of clinical hematology/hemostasis, chemistry and urinalysis procedures. Course content will include new skills and procedures and the application of automation and automatic verification techniques, building on the skills and procedures presented in MLS 407 Clinical Laboratory Operations, MLS 408 Introduction to Clinical Hematology and MLS 410 Introduction to Clinical Chemistry and Urinalysis.

MLS 445 Clinical Core Laboratory Practicum II (1 credit hour)
This course provides practical application in a clinical laboratory setting for the technical performance and evaluation of clinical hematology/hemostasis, chemistry and urinalysis procedures. Course content will include new skills and procedures, in addition to the skills and procedures presented in MLS 444 Clinical Core Laboratory Practicum I.

MLS 448 Clinical Microbiology Laboratory Practicum I (1 credit hour)
This course provides practical application in a clinical laboratory setting for the technical performance and evaluation of clinical microbiology procedures. Course content will include new skills and procedures, in addition to the skills and procedures presented in MLS 407 Clinical Laboratory Operations and MLS 409 Introduction to Clinical Microbiology.
Courses continued:
MLS 449 Clinical Microbiology Laboratory Practicum II (1 credit hour)
This course provides practical application in a clinical laboratory setting for the technical performance and evaluation of clinical microbiology procedures. Course content will include new skills and procedures, in addition to the skills and procedures presented in MLS 448 Clinical Microbiology Laboratory Practicum I.
PURPOSE: To ensure the standardization of clinical courses in each program.

MINIMUM GUIDELINES AND STANDARDS:

Minimum guidelines for the clinical courses are determined by the Medical Laboratory Science Curriculum Committee of the Medical Laboratory Science Program.

These guidelines specify minimum standards. Each program is required to meet or exceed these minimum standards.

The minimum standards for the clinical courses are:

1. The clinical courses shall include supervised clinical laboratory experiences, simulations and/or student laboratory in the following areas: chemistry, hematology, microbiology, immunohematology, molecular, urinalysis and body fluids, and phlebotomy.

2. Each student shall be provided an adequate rotation in the major areas of the clinical laboratory.

3. Minimum length of rotations shall meet the current standards for determining credit value for courses as approved by the College of Allied Health Professions of UNMC.

4. Clinical laboratory experience shall include representative methods, both manual and automated, applicable to that specific area.

5. Each student's final grade in a clinical area shall include an evaluation of the application of theory, practical laboratory performance, and professional behaviors. Grading criteria will be specified in each clinical course syllabi.
PURPOSE: To establish a uniform examination policy for the MLS Program.

USE AND MAINTENANCE:

Examinations are used to assess the medical laboratory science student’s understanding and competency of academic material and technical skills. Examinations may consist of unit, comprehensive, and lab practical examinations.

All test questions are to be maintained as “secure”; therefore examinations will not be returned to the medical laboratory science student. Students will be allowed to review the examination under supervision. Copying, printing, or saving of examinations by the student will not be allowed.

Examinations will be maintained by the respective program official or faculty member for a period of at least 30 days after the posting of the student’s final grade report. If an appeal has not been filed in that time, the program official may destroy the examinations.

TESTING GUIDELINES: The following testing guidelines will be used:

1. Examinations will be proctored.

2. Students will be seated with ample separation space between each other.

3. Examinations (except for hands-on practical examinations) will be completed using online examination software (e.g., ExamSoft/SofTest). Students must have a personal device that meets compatibility requirements as published by the examination software and UNMC CAHP. Paper examinations are utilized by program permission only and on an exam-by-exam basis. See: http://www.unmc.edu/alliedhealth/admissions/computers.html

4. Students will be permitted to utilize the calculator available within the examination software. If approved to use another calculator, the approved calculator may not be pre-programmed with formulas, calculations or other sensitive information. Use of a calculator other than provided by examination software will be approved for each exam as appropriate.

5. Students will not be permitted to have academic material near their seats while taking exams. Examples include, but are not limited to the following:
   a. Cellular telephones; electronic devices other than what is required to utilize examination software, such as personal digital assistants (PDAs), devices with computer communication and/or memory capability, electronic paging devices, recording or filming devices, iPods or radios
   b. Coats, jackets, headwear, backpacks, book bags, briefcases
   c. Books, notes, study materials

6. Pencils, erasers and scratch paper will be provided to the student when taking exams.
Testing Guidelines Continued:

Students who abuse testing guidelines will be asked to surrender their unfinished examination to the proctor and/or to exit the examination software per proctor direction and will be asked to leave the examination room. The exam will not be scored, and a grade of zero will be entered as the grade. The proctor will present the Nonprofessional Behavior documentation form, ask that it be signed by the student, and a conference with a program official will follow. This form then becomes a part of the student's permanent record. Abuse of testing guidelines may be grounds for dismissal from the Medical Laboratory Science Program (see Policy SA 11.0).

ALTERNATE EXAM DATES:
A student who is unable to complete an examination at the scheduled time shall make arrangements with the appropriate program official and faculty contact to take the examination according to these guidelines:

1. Arrangements to take the examination before the regularly scheduled time will be made by the appropriate program official and/or faculty of the specific course as outlined in the course guidelines.

2. Completion of missed exams is expected to be timely, preferably upon a student's return to class. Individual considerations may be made for a student based on extenuating circumstances. All previously published course guidelines must be adhered to.
PURPOSE: To provide for consistent and fair evaluation and grading practices in the combined lecture series.

EVALUATION OF OBJECTIVES:

The topics and content of the Lecture series shall be essential or complementary to the curriculum of each of the affiliated programs.

The level of the lecture material shall depend on its placement in the series and the minimum background level of the students as identified by the Curriculum Committee.

The objectives of the lecture series shall be reviewed annually.

EVALUATION OF LECTURE PRESENTATIONS:

An evaluation of the overall effectiveness of lectures shall be carried out by faculty in attendance. Students shall be asked to complete an evaluation form at the completion of each lecture. Information and suggestions from these evaluations are reviewed by the members of the Curriculum Committee for future planning.

Evaluation of lecture presentations shall include:

1. Organization of material
2. Presentation of material
3. Appropriateness of information for level of learning of the students
4. Overall achievement of objectives

EVALUATION OF STUDENT ACHIEVEMENT:

Achievement of students in the Combined Lecture Series shall be evaluated by objective type examinations composed of questions approved by the respective lecturers. Examinations shall be reviewed and edited into standard format prior to administration by members of the Curriculum Committee.

Statistical analysis of each examination is reviewed by the Curriculum Committee.
PURPOSE: To provide for consistent and fair evaluation and grading practices in the courses in the MLS curriculum.

EVALUATION SYSTEM:
The student's final grade in each clinical course shall include an evaluation of any theoretical aspects, technical components, and professional behaviors (Satisfactory). Grading criteria will be specified in each clinical course syllabus.

To satisfactorily complete each course, a student must maintain minimum passing requirements as stated in each course syllabus.
PURPOSE: To state the philosophy of the Curriculum Committee on practical experience/service work for MLS students.

PRACTICAL EXPERIENCE:
The Medical Laboratory Science Program is dedicated to providing quality education for their students. Participation in the practical aspects of the laboratory is an essential portion of our educational process. In a busy clinical laboratory, the best source of practical experience is patient work. To this end, we provide supervised experiences for our students with the opportunity to participate in the service aspects of the laboratory. This adds a personal dimension to the educational process which is essential for the development of a professional laboratorian. It is clear that some of these tasks could be classified as providing service to the patients of our institution. For this reason, we have developed these guidelines for students in the Clinical Laboratory Science Program.

1. All service procedures required of the students will be supervised experiences used to develop mastery techniques and reinforce theoretical aspects.

2. Reinforcement by repetition is encouraged.

3. Provision of services by MLS students on nights, weekends, and holidays is not encouraged unless there are specific, definable, educational objectives associated with the experience. These experiences will be under the supervision of qualified personnel.
PURPOSE: To establish guidelines whereby a student accepted into the Medical Laboratory Science Program, who presents appropriate credentials/experience, might be given the opportunity to challenge selected portions of the curriculum.

PROCESS:

A student who desires to be considered for advanced placement in the program must submit a written request to the appropriate program officials prior to August 1, of the year the student enrolls. The request should include a documentation of credentials/experience and a designation of the portion of the clinical curriculum the student desires to challenge.

CREDENTIALS:

Appropriate credentials a student may present to challenge selected portions of the curriculum include:

1. Certification as a medical laboratory technician.
2. Documentation of completion of a NAACLS accredited curriculum for medical laboratory technicians.
3. Documentation of work experience acceptable to the Combined Program Committee.
4. Other documented credentials acceptable to the Combined Program Committee.

CHALLENGE:

The program officials shall review the student's credentials and shall be responsible for submitting a written plan delineating the competencies the student desires to challenge. Challenge examinations (written and/or practical) will be representative of the examinations used to assess progress in that component of the curriculum in each individual program.

The plan for challenge shall be approved by the Curriculum Committee.
LIMITATIONS OF CHALLENGE:

The MLS student may only challenge the technical component of a course.

SCHEDULE:

Any adjustment of the schedule, resulting from successful challenge of competencies, shall be determined by the appropriate program officials.
PURPOSE: To establish a uniform policy for the retention of materials used for the evaluation of clinical laboratory science student’s academic performance.

EXAMINATIONS AND EVALUATION MATERIALS:

Examinations, technical evaluations, and professional behavior evaluations are maintained by the program for a period of at least 30 days after the posting of the student’s final grade report. If a grade appeal has not been filed in that time, the program may destroy the examinations and evaluations.

STUDENT RECORDS:

Each student’s file shall contain the following while in the program:

1. UNMC application form
2. Copy of official college transcripts
3. Record of transcript evaluation

PERMANENT STUDENT RECORDS

1. Academic transcript (maintained by the UNMC Registrar) or record with: legal name, grades/credits, dates of admission and completion

Documentation of any counseling reports/sessions is maintained for two years.

Each student shall have access to their records. No portion of the student’s record shall be released without written approval from the student.
PURPOSE: To provide for consistent and fair grading practices in the Clinical Laboratory Science Program.

GRADING SYSTEM:

Each course in the Clinical Laboratory Science curriculum is graded separately (see Policy CU 2.0).

The grading system employed by the Medical Laboratory Science Program is:

<table>
<thead>
<tr>
<th>GRADE</th>
<th>Percentage</th>
<th>GRADE POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>97.00-100</td>
<td>4.0</td>
</tr>
<tr>
<td>A</td>
<td>93.00-96.99</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>90.00-92.99</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>87.00-89.99</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>83.00-86.99</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>80.00-82.99</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>77.00-79.99</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>73.00-76.99</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>70.00-72.99</td>
<td>1.67</td>
</tr>
<tr>
<td>D+</td>
<td>67.00-69.99</td>
<td>1.33</td>
</tr>
<tr>
<td>D</td>
<td>63.00-66.99</td>
<td>1.00</td>
</tr>
<tr>
<td>D-</td>
<td>60.00-62.99</td>
<td>0.67</td>
</tr>
<tr>
<td>Failing</td>
<td>0.00-59.99</td>
<td>0.00</td>
</tr>
</tbody>
</table>

WP – Withdrew Passing; WF – Withdrew Failing; I – Incomplete; NR – No report; WX – Administrative Withdrawal; W – withdrawal (good standing).

Any course for which all requirements have not been fulfilled by a student may be reported by the instructor as “Incomplete.” The instructor thereby indicates that the student’s progress in the course is satisfactory, and the student has been allowed additional time to complete a course in which a passing grade is possible. When the student does not complete the course in the allowed additional time, a failing grade is reported for the course.

The program director of each program reserves the right to recommend that a student withdraw if health, academic progress, or other factors make it impractical and inadvisable for the student to continue in the program.
PURPOSE: To describe career entry competencies expected of our Medical Laboratory Science graduates.

COMPETENCIES:

Upon completion of the curriculum, the graduates are able to:

1. Develop and perform procedures for collecting, processing, and evaluating specimens and to resolve problems relating to specimen handling.

2. Perform accurately analytical tests of body fluids, cells, and other substances.

3. Integrate data, correlate clinical test results to the patient’s condition, and use these skills to recognize discrepancies in patient results.

4. Follow protocol concerning confirmation of abnormal results.

5. Apply quality assurance and performance improvement initiatives.

6. Follow protocol concerning quality control results, troubleshoot quality control problems, and institute procedures to maintain accuracy and precision.

7. Participate in preventive and corrective maintenance on equipment and instrumentation, as well as identify appropriate sources for repair.

8. Develop, evaluate, and select new methods for implementation within laboratory resources.

9. Exercise professional ethics and demonstrate professional conduct and interpersonal skills with patients, laboratory personnel, other health care professionals, and the public.

10. Establish and maintain a program of personal continuing education as a function of growth and maintenance of professional competence.

11. Provide leadership in educating other health care personnel and the community.

12. Exercise principles of laboratory operations and management including healthcare delivery systems.
13. Exercise principles of laboratory safety.

14. Apply principles of educational methodology.

15. Apply principles of current information systems.

16. Apply principles of research methodologies.

17. Demonstrate knowledge of governmental regulations and standards.
PURPOSE: To describe guidelines for the evaluation of the MLS Program.

PROCESS:

The Curriculum Committee administers the evaluation process and maintains documentation of program evaluation.

Evaluation of the programs in the Medical Laboratory Science Program shall address the following:

1. EFFECTIVENESS OF THE PROGRAM

   The program administration shall have a continuing system for reviewing the effectiveness of the program including a formal Self-Study process required for continuing accreditation.

2. PERFORMANCE OF GRADUATES

   The program evaluation shall include documentation of performance by graduates on external certification examinations, as well as, graduate and employer surveys.

3. GRADUATION AND PLACEMENT RATES

   The program evaluation shall include a review of graduation rates and placement rates for all students.

4. EVALUATION REFLECTED IN THE CURRICULUM AND OVERALL PROGRAM

   The results of the program evaluation shall be documented and reflected in the curriculum and other elements of the program.

Evaluation feedback shall be obtained from students, graduates, faculty, employers of graduates, advisory groups, certification examinations, surveys, and interviews.

Such outcomes assessment shall incorporate a plan for identifying areas of concern and documentation of the changes implemented to address such concerns.