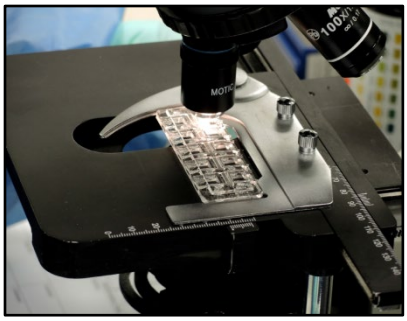
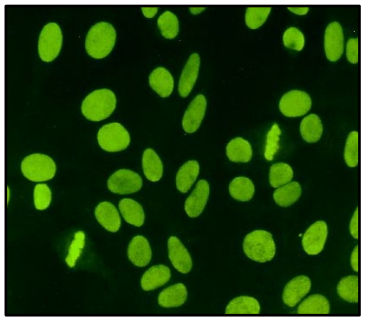
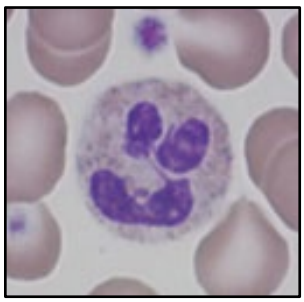
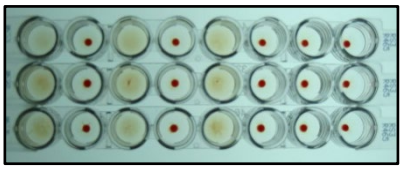
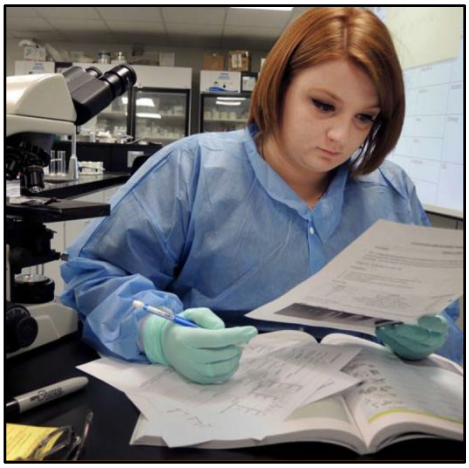
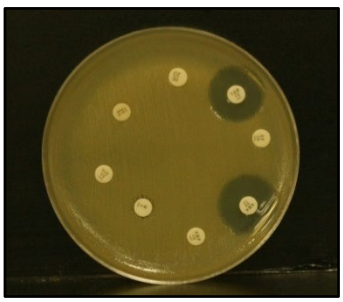
CLINICAL LABORATORY SCIENCES STUDENT HANDBOOK 2023 – 2024 ACADEMIC YEAR





UNIVERSITY OF KANSAS MEDICAL CENTER
SCHOOL OF HEALTH PROFESSIONS
DEPARTMENT OF CLINICAL LABORATORY SCIENCES

THIS HANDBOOK REPLACES ALL PREVIOUSLY PUBLISHED KUMC CLS STUDENT HANDBOOKS

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ACCREDITATION STATEMENT

The Department of Clinical Laboratory Sciences' Medical Laboratory Science (MLS) Program and Diagnostic Molecular Science (DMS) Program are accredited by:

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

5600 N. River Road #720
Rosemont, IL 60018

Phone: (773) 714-8880
Fax: (773) 714-8886

E-mail: info@naacls.org
www.naacls.org

UNIVERSITY OF KANSAS MEDICAL CENTER
Mission Statement

"To improve lives and communities in Kansas and beyond through innovation in education, research and health care."

This KUMC mission statement can be found at the following website:
https://www.kumc.edu/about/leadership/strategic-plan.html

SCHOOL OF HEALTH PROFESSIONS

Mission Statement

"To serve the citizens of Kansas, the region, the national and to develop tomorrow's leaders through exemplary education, research and service."

The mission of the School of Health Professions can be found at this website:
https://www.kumc.edu/school-of-health-professions/about/history.html

UNIVERSITY OF KANSAS MEDICAL CENTER
Equal Opportunity Statement

KU Medical Center is committed to the elimination and prevention of discrimination or harassment based on race, religion, color, ethnicity, sex, disability, national origin, ancestry, age, status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression, genetic information or retaliation. KU Medical Center and the KUMC Sexual Harassment Policy also prohibit all forms of sexual violence, including domestic violence, relationship violence, stalking and assault. Allegations of violations of the University's Nondiscrimination Policy are investigated in accordance with the Discrimination Complaint Resolution Process. Additionally, KU Medical Center prohibits retaliation against anyone who files a complaint or otherwise participates in the complaint process.

If you believe that you are being discriminated against or harassed, contact Natalie Holick, KUMC's Title IX Coordinator, at (913) 588-8011 or noholick@kumc.edu to discuss your rights and options for filing a complaint or taking other steps to help stop the behavior.

Policies and procedures are available through the KU Medical Center Equal Opportunity Office: http://www.kumc.edu/compliance-services/office-of-compliance/equal-opportunity-office.html.

UNIVERSITY OF KANSAS MEDICAL CENTER
Diversity, Equity, and Inclusion

The University of Kansas Medical Center is committed to creating and maintaining a diverse and inclusive learning and working environment that nurtures the growth and development of our students, faculty, staff, and patients.

KUMC defines diversity as a state of being in which the variety of cultures, experiences, expertise, and viewpoints are valued and incorporated into the fabric of our community. Diversity encompasses age, education level, ethnicity and race, gender expression and identity, nationality, national origin, physical and mental ability, political and religious perspectives, sex, sexual orientation, socioeconomic status, veteran status, and other human differences.

By embracing diversity our University will attract and retain skilled and talented employees and students dedicated to excellence in education, research, patient care, community, and global initiatives. A diverse and inclusive community that fosters mutual respect requires the engagement of the University at all levels.

For more information, visit: http://www.kumc.edu/diversity.html

CLINICAL LABORATORY SCIENCES DEPARTMENT
SCHOOL OF HEALTH PROFESSIONS
UNIVERSITY OF KANSAS MEDICAL CENTER

VISION OF THE DEPARTMENT OF CLINICAL LABORATORY SCIENCES DEPARTMENT AND ITS ACADEMIC PROGRAMS

The ***vision*** of the Department of Clinical Laboratory Sciences and its Academic Programs is to produce exemplary clinical laboratory science professionals qualified to provide safe and competent services to the public.

MISSION OF THE DEPARTMENT OF CLINICAL LABORATORY SCIENCES DEPARTMENT

The ***mission*** of the Clinical Laboratory Sciences Department is to provide undergraduate and graduate programs in a setting where qualified students can prepare themselves for careers in the clinical laboratory sciences. The Department, an integral part of the University of Kansas Medical Center, subscribes to and supports the mission of the University of Kansas Medical Center.

The Department is to be responsive to current manpower needs in the life science and health care systems, and, when appropriate, provide leadership in developing programs to meet those needs. The Department strives to provide the best possible resources for attainment of the stated mission.

MISSION OF THE MLS AND DMS PROGRAMS

The ***mission*** of the Programs is to provide a setting where qualified students can prepare themselves for a career in the clinical laboratory sciences. The opportunities provided are to be such that students can obtain a sound education and develop the manual and intellectual skills needed for career entry into clinical and research laboratories. The program strives to develop in the student an understanding of, and an appreciation for, the patient's needs and concerns and for the needs and concerns of other members of the health care team.

PROGRAM GOALS

To fulfill these missions as well as meet the needs of the clinical laboratory community, the Department's programs will:

- Provide an exceptional curriculum that allows graduates to perform as competent career entry professionals
- Promote transfer of knowledge and skills relevant to the current and evolving scope of practice
- Promote the development of critical thinking, clinical reasoning, and creative problem-solving skills
- Explore, cultivate, and integrate innovative educational methods in clinical laboratory science education
- Promote the profession through innovative education and engagement
- Promote interprofessional education and practice between medical laboratory scientists, diagnostic molecular scientists, and other healthcare professionals
- Promote opportunities to develop communication, teamwork, and leadership skills that will enable graduates to function as an integral member or the healthcare team
- Cultivate an environment of active participation in professional organizations
- Model professional, ethical practice, and leadership

CODE OF ETHICS FOR CLS STUDENTS

We, as students in the Department of Clinical Laboratory Sciences, will apply the following Code of Ethics to our actions toward patients, physicians, and hospital personnel in our clinical program and in our future work. This code will apply to our personal as well as professional attitudes and conduct.

As Professionals we will:

- assume a professional manner in attire and conduct;
- treat our fellow humans with care, dignity and patience;
- establish a rapport with hospital staff, supervisors, and physicians;
- hold in confidence information relating to patients;
- strive for increased efficiency and quality through organization;
- be willing to accept responsibility for our own work and results;
- strive to learn the theories of laboratory determinations;
- establish confidence of the patient through kindness and empathy.

In Personal conduct we will:

- achieve the highest degree of honesty and integrity;
- maintain adaptability in action and attitude;
- establish a sense of fraternity among fellow students;
- strive to have a pleasant manner in the laboratory and with the patients;
- remember that we are University as well as Clinical Laboratory Science students; therefore, we should strive to be educated individuals outside our technical field and uphold the highest standards of respect to our fellow man.

PLEDGE TO THE PROFESSION FOR CLS STUDENTS

As a Medical Laboratory Professional, I pledge to uphold my duty to Patients, the Profession and Society by:

- Placing patients' welfare above my own needs and desires.
- Ensuring that each patient receives care that is safe, effective, efficient, timely, equitable and patient-centered.
- Maintaining the dignity and respect for my profession.
- Promoting the advancement of my profession.
- Ensuring collegial relationships within the clinical laboratory and with other patient care providers.
- Improving access to laboratory services.
- Promoting equitable distribution of healthcare resources.
- Complying with laws and regulations and protecting patients from others' incompetent or illegal practice
- Changing conditions where necessary to advance the best interests of patients.

I will actively demonstrate my commitment to these responsibilities throughout my professional life.

From the ASCLS Code of Ethics: https://www.ascls.org/about-us/code-of-ethics

THE UNIVERSITY OF KANSAS
SCHOOL OF HEALTH PROFESSIONS

ORGANIZATIONAL STRUCTURE

DEAN

Abiodun Akinwuntan, Ph.D., MPH, MBA

ASSOCIATE DEANS

Academic and Student Affairs	Jeff Radel, PhD
Research	Jacob Sosnoff, PhD
Community Engagement & Workforce Initiatives	David Burnett, PhD, RRT

DEPARTMENT CHAIRS

CLINICAL LABORATORY SCIENCES	Eric Elsinghorst, PhD, MPH, MLS(ASCP) ^{CM}MB^{CM}
DIETETICS and NUTRITION	Debra Sullivan, PhD, RD
HEALTH INFORMATION MANAGEMENT	Rosann McLean, DHSc, RHIA, CDIP
HEARING & SPEECH	Tiffany Johnson, PhD, CCC-A
NURSE ANESTHESIA	Donna Nyght, CRNA, DNP
OCCUPATIONAL THERAPY	Dory Sabata, OTD, OTR/L, SCEM, FAOTA
PHYSICAL THERAPY	Patricia M. Kluding, PT, PhD
RESPIRATORY CARE	Lisa M. Trujillo, DHSc, RRT

THE UNIVERSITY OF KANSAS
SCHOOL OF HEALTH PROFESSIONS

DEAN'S OFFICE – *Located in 1024 Murphy Building*

Abiodun Akinwuntan, Ph.D., MPH, MBA
Dean and Professor
(913) 588-5235
E-mail: aakinwuntan@kumc.edu

Tiffany Pollard
Executive Assistant
(913) 588-5235
E-mail: tpollard2@kumc.edu

BUSINESS, STUDENT & FISCAL AFFAIRS – *Located in 4040 School of Nursing Building*

Erin Manuel
Director of Business & Fiscal Affairs
(913) 588-5277
E-mail: emanuel@kumc.edu

Christine Jones
Senior Coordinator
(913) 588-5275
E-mail: cjones24@kumc.edu

NETWORKING & MULTIMEDIA/WEB DEVELOPMENT

Tim Hunt
Network Specialist
(913) 588-8966
E-mail: shphelp@kumc.edu

Terry Erisman
Information Resource Specialist
(913) 588-4411
E-mail: TERISMAN@kumc.edu

CLINICAL LABORATORY SCIENCES DEPARTMENT

PROGRAM OFFICIAL	TITLE	PHONE
Eric Elsinghorst, Ph.D., MPH, MLS(ASCP) CMMBCM	Chair, Program Director	(913) 588-1089

COURSE/CONTENT AREA	FACULTY	PHONE
Biochemistry	Robin Maser, PhD	(913) 945-6794
Fundamental Techniques & Clinical Immunology	Letycia Nunez-Argote, PhD, MPH, MLS(ASCP)CM	(913) 588-0156
Clinical Chemistry	Leah Ade, MPH, MLS(ASCP)CM WenFang Wang, PhD, C(ASCP) CM	(913) 588-0154 (913) 588-0151
Hematology	Renee Hodgkins, PhD, MT(ASCP) Jennifer Jones, BS, MLS(ASCP)CM	(913) 945-9206 (913) 588-1099
Immunohematology	Leah Ade, MPH, MLS(ASCP)CM Yan Zheng, PhD, MLS(ASCP)CM	(913) 588-0154 (913) 588-8148
Immunology	Letycia Nunez-Argote, PhD, MPH, MLS(ASCP)CM	(913) 588-0156
Management	Drew Jones, MBA, MLS(ASCP)CM	(913) 588-1177
Microbiology	Alexis Carpenter, PhD, MLS(ASCP)CM Drew Jones, MBA, MLS(ASCP)CM	(913) 588-8144 (913) 588-1177
Molecular Diagnostics	Eric Elsinghorst, PhD, MPH, MLS(ASCP) CMMBCM	(913) 588-1089
Molecular Biotechnology	Eric Elsinghorst, PhD, MPH, MLS(ASCP) CMMBCM	(913) 588-1089
Phlebotomy	Kasey Edwardson, PhD, MPH, MLS(ASCP)CMSCCM	(913) 588-2286
Professional Development	Leah Ade, MPH, MLS(ASCP)CM Jennifer Jones, BS, MLS(ASCP)CM	(913) 588-0154 (913) 588-1099

Office Staff	Suzanne Russell - Admin Assistant	(913) 588-5221

CLINICAL AFFILIATES

Clinical Concentration (NAACLS accredited MLS Program)	
➢ Children's Mercy Hospital Kansas City, MO	➢ Prime Healthcare –St. Joseph Medical Center, Kansas City, MO
➢ Mosaic Life Care St. Joseph, MO	➢ Quest Diagnostics Lenexa, KS
➢ LMH Health Lawrence, KS	➢ AdventHealth - Shawnee Mission Merriam, KS
➢ Liberty Hospital Liberty, MO	➢ University Health - Truman Medical Center Kansas City, MO
➢ University of Kansas Health System - St. Francis Campus Topeka, KS	➢ University of Kansas Health System Kansas City, KS
➢ Stormont Vail Health Topeka, KS	➢ St. Joseph Medical Center Kansas City, MO
➢ LabCorp of America Overland Park, KS	➢ Veterans Administration Medical Center Kansas City, MO
➢ Wesley Healthcare Wichita, KS	➢ Ascension Via Christi Wichita, KS
➢ Salina Regional Medical Center Salina, KS	➢ Hutchinson Regional Medical Center Hutchison, KS
➢ Olathe Medical Center Olathe, KS	➢ Liberty Hospital Liberty, MO

Molecular Biotechnology Concentration (NAACLS accredited DMS Program)	
➢ CEVA- Biomune Lenexa, KS	➢ University of Kansas Health System Kansas City, KS
➢ Children's Mercy Hospital Kansas City, MO	➢ Quest Diagnostics Lenexa, KS
➢ Clinical Reference Laboratory Lenexa, KS	➢ Stowers Institute for Medical Research Kansas City, MO
➢ Kansas City Police Crime Lab Kansas City, MO	➢ Eurofins-Viracor Lenexa, KS
➢ Midwest Transplant Network Westwood, KS	➢ Sinochips Diagnostics Olathe, KS
➢ Johnson County Sheriff's Office Criminalistics Laboratory, Olathe, KS	

UNIVERSITY OF KANSAS MEDICAL CENTER
SCHOOL OF HEALTH PROFESSIONS
CLINICAL LABORATORY SCIENCES DEPARTMENT

TECHNICAL STANDARDS FOR ADMISSION AND RETENTION

Because a Bachelor of Science Degree in Clinical Laboratory Sciences signifies that the holder is eligible to sit for the Board of Certification examination at the medical laboratory scientist and molecular biologist level, and signifies that the holder is prepared for entry into the profession of clinical laboratory science, it follows that graduates must have the knowledge and skills to function in a broad variety of clinical, research, and industrial laboratory situations and to demonstrate entry level competencies at all levels of professional practice. Therefore, the following abilities and expectations must be met by all students admitted to the program.

1. **Essential Observational Requirements for Clinical Laboratory Sciences**

   The CLS student must be able to:

   - observe and perform laboratory demonstrations in which biologicals (i.e., body fluids, culture materials, tissue sections, and cellular specimens) are tested for their biochemical, hematological, immunological, microbiological, and histochemical components;
   - characterize the color, odor, clarity, and viscosity of biological, reagents, or chemical reaction products;
   - employ a clinical grade binocular microscope to discriminate among fine structural and color (hue, shading, and intensity) differences of microscopic specimens;
   - read and comprehend text, numbers, and graphs displayed in print and on electronic devices (computer, video, phone, etc.).

2. **Essential Movement Requirements for Clinical Laboratory Sciences**

   The CLS student must be able to:

   - move freely and safely about a laboratory;
   - reach laboratory bench-tops and shelves, patients lying in hospital beds or patients seated in specimen collection furniture;
   - travel to numerous clinical laboratory sites for practical experience;
   - perform moderately taxing continuous physical work, often requiring prolonged sitting and standing, over several hours;
   - maneuver phlebotomy and culture acquisition equipment to safely collect valid laboratory specimens from patients;
   - safely control laboratory equipment (i.e. pipettes, inoculating loops, test tubes) and adjust instruments to perform laboratory procedures;
   - use an electronic keyboard (i.e. 101-key IBM computer keyboard) to operate laboratory instruments and to calculate, record, evaluate, and transmit laboratory information.

3. **Essential Communication Requirement for Clinical Laboratory Sciences**

   The CLS student must be able to:

   - read and comprehend technical and professional materials (i.e. textbooks, magazine and journal articles, handbooks, and instruction manuals);
   - follow verbal or written instructions in order to correctly and independently perform laboratory test procedures;
   - clearly instruct patients prior to specimen collection;
   - effectively, confidently, and sensitively converse with patients regarding laboratory tests;
   - communicate with faculty members, fellow students, staff, and other health care professionals verbally, non-verbally, and in a recorded format (writing, typing, graphics, or telecommunication);
   - independently prepare papers, prepare laboratory reports, and take paper, computer, and laboratory practical examinations.

4. **Essential Intellectual Requirement for Clinical Laboratory Sciences**

   The CLS student must:

   - possess these intellectual skills: comprehension, measurement, mathematical calculation, problem solving, reasoning, integration, analysis, comparison, self-expression, and criticism;
   - be able to exercise sufficient judgment to recognize and correct performance deviations.

5. **Essential Behavioral Requirements for Clinical Laboratory Sciences**

   The CLS student must:

   - be able to manage the use of time and be able to systematize actions in order to complete professional and technical tasks within realistic constraints;
   - possess the emotional health necessary to effectively employ intellect and exercise appropriate judgment. Demonstrate appropriate affective behaviors and mental attitudes to not jeopardize the emotional, physical, mental and behavioral safety of patients and other individuals with whom there is interaction in the academic and clinical settings;
   - possess the mental and emotional rigor to demonstrate respect to all people, including fellow students, faculty, patients and medical personnel, without showing bias or preference on the basis of race, color, age, sex, religion or creed, national origin or ancestry, gender expression, gender identity, disability, veteran status, sexual orientation or genetic testing and screening;
   - be able to provide professional and technical services while experiencing the stresses of heavy workloads (i.e. ordering, ambivalent test interpretation), emergent demands (i.e. "stat" test orders), and a distracting environment (i.e. high noise levels, crowding, complex visual stimuli);
   - be flexible and creative and adapt to professional and technical change;
   - recognize potentially hazardous materials, equipment, and situations and proceed safely in order to minimize risk of injury to patients, self, and nearby individuals;
   - adapt to working with unpleasant biological;
   - support and promote the activities of fellow students and of health care professionals. Promotion of peers helps furnish a team approach to learning, task completion, problem solving, and patient care;
   - be honest, compassionate, ethical, and responsible. The student must be forthright about errors or uncertainty. The student must be able to critically evaluate her or his own performance, accept constructive criticism, and look for ways to improve (i.e. participate in enriched educational activities). The student must be able to evaluate the performance of fellow students and tactfully offer constructive comments.

KU Medical Center is committed to equal opportunity for students with disabilities. All students admitted to the KU Medical Center Clinical laboratory Sciences program must be able to meet the following requirements and expectations **with or without accommodation(s).** Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide appropriate documentation of disability and submit a request for accommodation to:

Cyn Ukoko, Academic Accommodations Office
913-945-7035
cukoko@kumc.edu
1006 Dykes Library

UNIVERSITY OF KANSAS MEDICAL CENTER
SCHOOL OF HEALTH PROFESSIONS
CLINICAL LABORATORY SCIENCES DEPARTMENT

TECHNICAL STANDARDS FOR ADMISSION AND RETENTION

The expectations for clinical laboratory sciences students are published in the Technical Standards you received with the application materials. The standards identify the requirements for admission, retention and graduation of applicants and students respectively.

Graduates are expected to be qualified to enter the field of Clinical Laboratory Sciences. Therefore, 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 requirements. If you have questions about the process for requesting accommodations, please contact: Academic Accommodations Services Office, University of Kansas Medical Center, at 913-945-7035, TDD Kansas Relay Number: 1-800-766-3777.

Please sign and date this form and return it to the Department of Clinical Laboratory Sciences.

I certify that I have read and understand the University of Kansas Medical Center Clinical Laboratory Sciences Program's *Technical Standards for Admission and Retention* and that I meet each of them, with or without reasonable accommodation.

_____ _____

Signature Date

_____

Printed or Typed Name

KUMC IS AN EO/AA/TITLE IX INSTITUTION

ACCOMMODATION OF INDIVIDUALS WITH DISABILITIES

Accommodation Policy:

It is the policy of the University of Kansas Medical Center to provide reasonable accommodation to qualified individuals with known impairments that meet the statutory definition of a covered disability except where such accommodation would impose an undue hardship or present the threat of harm. Reasonable accommodation applies to all aspects of employment and all educational programs, services and activities. Persons with disabilities who are covered under this policy include students who satisfy eligibility criteria; and, with or without reasonable accommodation, meet the technical standards and matriculation requirements of the program.

In order to maintain the integrity of the curriculum and standards of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), it is inevitable that the inability to adhere to the technical standards will disqualify some students. This does not imply however, that a program has discriminated against these students on the basis of a protected class, e.g., sex, race, color, national origin or ancestry, age, religion or creed, disability, veteran status or sexual orientation. The University is committed to providing equal opportunity and non-discrimination to all members of the academic community, including students.

Procedure for Requesting Accommodation:

Students who believe they may need academic accommodations are encouraged to contact Cynthia Ukoko, in the Academic Accommodations Services Office as soon as possible to better ensure that such accommodations can be implemented in a timely fashion.

For online information about academic accommodations, please go to http://www.kumc.edu/student-affairs/academic-accommodation-services.html. Online appointments may also be made at https://medconsult.kumc.edu.

Cynthia Ukoko, Academic Accommodations Services Office
G020 Dykes Library
Mail Stop: 4029
cukoko@kumc.edu
Telephone: (913) 945-7035

Students may also discuss their need(s) for accommodation with faculty or the school's Disability Officer.

DESCRIPTION OF THE PROFESSION

Medical Laboratory Scientist (MLS)*

The medical laboratory scientist is qualified by academic and applied science education to provide service and research in clinical laboratory science and related areas in rapidly changing and dynamic healthcare delivery systems. Medical laboratory scientists perform, develop, evaluate, correlate and assure accuracy and validity of laboratory information; direct and supervise clinical laboratory resources and operations; and collaborate in the diagnosis and treatment of patients. The medical laboratory scientist has diverse and multi-level functions in the principles, methodologies and performance of assays; problem-solving; troubleshooting techniques; interpretation and evaluation of clinical procedures and results; statistical approaches to data evaluation; principles and practices of quality assurance/quality improvement; and continuous assessment of laboratory services for all major areas practiced in the contemporary clinical laboratory. Medical laboratory scientists possess the skills necessary for financial, operations, marketing, and human resource management of the clinical laboratory.

Medical laboratory scientists practice independently and collaboratively, being responsible for their own actions, as defined by the profession. They have the requisite knowledge and skills to educate laboratory professionals, other health care professionals, and others in laboratory practice as well as the public.

The ability to relate to people, a capacity for calm and reasoned judgment and a demonstration of commitment to the patient are essential qualities. Communications skills extend to consultative interactions with members of the healthcare team, external relations, customer service and patient education.

Medical laboratory scientists demonstrate ethical and moral attitudes and principles that are necessary for gaining and maintaining the confidence of patients, professional associates, and the community.

Diagnostic Molecular Scientist (DMS)*

Diagnostic molecular scientist professionals are qualified by academic and applied science education to provide service and research in the molecular diagnosis of acquired, inherited, and infectious diseases. They have diverse and multi-level functions in the areas of analysis and clinical decision-making, information management, regulatory compliance, education, and quality assurance/performance improvement. Diagnostic molecular scientists perform, develop, evaluate, correlate, and assure accuracy and validity of laboratory testing and procedures; direct and supervise laboratory resources and operations; and collaborate in the diagnosis and treatment of patients. They possess skills for financial, operations, marketing, and human resource management of the molecular pathology laboratory. Diagnostic molecular scientists practice independently and collaboratively, being responsible for their own actions, as defined by the profession. They have the requisite knowledge and skills to educate laboratory professionals, health care professionals, and others in laboratory practice, as well as the public.

The ability to relate to people, a capacity for calm and reasoned judgment, and a demonstration of commitment to the patient are essential qualities. Communication skills extend to consultative interactions with members of the healthcare team, external relations, customer service and patient education. Diagnostic molecular scientists demonstrate ethical and moral attitudes and principles that are necessary for gaining and maintaining the confidence of patients, professional associates, and the community. An attitude of respect for the patient and confidentiality of the patient's record and/or diagnosis must be maintained.

* *NAACLS Standards for Accredited Programs, The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), Adopted 2012, Revised 9/2013, 1/2014, 4/2014, 10/2014, 11/2014, 10/2015, 4/2016, 6/2016, 11/2016, 11/2017, 5/2018, 11/2018, 5/2019, 10/2019, 5/2020, 11/2020, 5/2021, 10/2021, 06/2022.*

EDUCATIONAL GOALS OF THE PROGRAM

Goal

The ***Goal*** of the programs in Clinical Laboratory Sciences is to provide graduates with lecture, student laboratory and applied educational experiences such that they can develop the competencies needed at career entry.

Career Entry Competencies

Medical Laboratory Scientist *

At entry level, the medical laboratory scientist will possess the entry level competencies necessary *to perform* the full range of clinical laboratory tests in areas such as Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunohematology/Transfusion medicine, Microbiology, Urine and Body Fluid Analysis and Laboratory Operations, and other emerging diagnostics, and will play a role in the development and evaluation of test systems and interpretive algorithms.

The medical laboratory scientist will have diverse responsibilities in areas of analysis and clinical decision-making, regulatory compliance with applicable regulations, education, and quality assurance/performance improvement wherever laboratory testing is researched, developed or performed.

At entry level, the medical laboratory scientist will have the following basic knowledge and skills in:

A. Application of safety and governmental regulations and standards as applied to clinical laboratory science;

B. Principles and practices of professional conduct and the significance of continuing professional development;

C. Communications sufficient to serve the needs of patients, the public and members of the health care team;

D. Principles and practices of administration and supervision as applied to clinical laboratory science;

E. Educational methodologies and terminology sufficient to train/educate users and providers of laboratory services;

F. Principles and practices of clinical study design, implementation and dissemination of results.

Diagnostic Molecular Scientist *

At career entry, the **Diagnostic Molecular Scientists** will be able to demonstrate entry level competencies such as:

- Evaluating and monitoring methods of collection, transport and handling of various specimen types for molecular analysis;
- Applying appropriate advanced principles and techniques to prepare specimens for molecular based testing, as well as troubleshooting and evaluating appropriate actions for problem resolution;
- Applying basic and advanced principles, practices and applications of molecular based testing for clinical laboratory diagnostic purposes;
- Performing appropriate techniques utilizing instrumentation for molecular analysis and correlating results with acquired, inherited and infectious diseases, and pharmacogenomics;

- Utilizing bioinformatic techniques and resources to evaluate genomic information for performing techniques, analyze molecular assays and genomic assays, and correlate assay results;
- Applying the principles and techniques of first, second, and third generation sequencing, correlating results with acquired, inherited, and infectious diseases;
- Complying with and performing preventive and corrective maintenance programs for instruments and equipment, as well as troubleshooting and evaluating appropriate actions for problem resolution;
- Investigating and applying advanced molecular principles, practices, and quality assurance to develop new assays or procedures as a result of studies on new technologies, as well as troubleshooting and evaluating appropriate solutions;
- Applying principles of quality control that evaluate data, including sequencing data, for necessity of repeat analysis, correlation with disease states, organism identification and disease diagnosis;
- Applying principles of quality assurance and performing measurements to assure validity and accuracy of laboratory data generated;
- Complying with laws, regulations and accrediting standards, as well as guidelines of relevant governmental and non-governmental agencies;
- Utilizing resource management strategies to maintain optimal laboratory efficiency;
- Exercising established procedures for general laboratory safety, biohazard containment and waste disposal;
- Demonstrating leadership, professional and ethical conduct and interpersonal skills for patients, clients, healthcare professionals and the public;
- Formulating a short-term and long-term plan for professional career development.

* *NAACLS Standards for Accredited Programs, The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), Adopted 2012, Revised 9/2013, 1/2014, 4/2014, 10/2014, 11/2014, 10/2015, 4/2016, 6/2016, 11/2016, 11/2017, 5/2018, 11/2018, 5/2019, 10/2019, 5/2020, 11/2020, 5/2021, 10/2021, 06/2022.*

Program Affective Objectives

Following appropriate instruction, students in the programs offered by Clinical Laboratory Sciences are expected to:

1. Adhere to all laboratory safety regulations.
2. Adhere to all pre-analytical, analytical, and post analytical laboratory policies, procedures, and practices.
3. Actively participate in the student laboratory assignments, clinical rotations, and lecture discussions.
4. Maintain a clean, orderly work area in student laboratories and clinical rotations without being asked.
5. Demonstrate proper care and use of laboratory equipment, as evidenced by proper operation, storage, and care of equipment.
6. Attend assigned lectures, student laboratories, and clinical rotations with punctuality.
7. Notify the instructor and the CLS office prior to an absence or late arrival to scheduled student lecture, laboratory, or clinical rotation. (Also notify clinical sites during clinical rotations.)
8. Comply with the stated dress code for the program and the clinical sites.

9. Demonstrate personal and professional integrity by abiding by the Code of Ethics previously stated in this handbook. Also refer to the KUMC Student Handbook specifically regarding the policies on sexual and other forms of harassment.
10. Demonstrate professional communication skills, as evidenced by appropriate interaction with faculty, other students, other health care professionals, and patients.
11. Accept instruction and constructive criticism maturely.
12. Demonstrate preparedness for student laboratories and clinical rotations by reading assigned materials ahead of time and completing the tasks with little need for additional instructions.

Program Psychomotor Objectives

Following appropriate instruction, students in the programs offered by Clinical Laboratory Sciences are expected to demonstrate the skills listed below:

1. **Specimen Collection and Processing**:
    a. determine the type and amount of sample needed for an assay;
    b. recognize appropriate versus inappropriate procedures for specimen collection and be able to establish appropriate procedures for specimen collection;
    c. perform venous or capillary punctures to obtain a blood specimen;
    d. instruct patients on fasting requirements;
    e. instruct patients on proper collection of timed urine samples;
    f. appropriately accept or reject a specimen for testing and appropriately handle and store the specimen between collection and analysis;
    g. demonstrate proper handling of infectious material.

2. **Initiation and Maintenance of Quality Assurance Procedures**:
    a. prepare and store reagents in a proper manner;
    b. prepare and analyze control materials, evaluate the results, and maintain records of reagent quality control (QC);
    c. discuss how QC is monitored, recorded, and evaluated and take appropriate action to correct situations when control results do not meet specifications; documenting all such actions;
    d. using appropriate references, evaluate and select appropriate control materials for specific tests and write a protocol to establish a quality control program;
    e. purchase quality control materials;
    f. recognize sources of random errors in testing.

3. **Instrument Utilization and Evaluation**:
    a. recognize proper instrument function;
    b. calibrate and standardize instrument;
    c. maintain inventory of replaceable parts for the instruments;
    d. establish and perform preventative maintenance procedures;
    e. establish an instrument performance monitoring system and recognize simple instrument malfunction;
    f. contribute comments and opinions when a new instrument, technique, or procedure is being evaluated for introduction into the laboratory.

4. **Test Performance and Interpretation**:
    a. organize samples and perform procedures in all clinical areas as indicated by course and practicum objectives;
    b. convert raw data into appropriate units;
    c. recognize normal and abnormal test results;
    d. suggest alternate or additional tests if abnormal results are obtained;
    e. recognize results as being consistent or inconsistent with usual patterns;
    f. recognize when test results should be investigated;
    g. recall the clinical significance of abnormal test results and recognize when this test is contradicted by results in other clinical laboratory areas;
    h. order work lists from the computer;
    i. report and verify all results either manually or using appropriate computer programs. Note: Any duties performed by the students at the clinical site are under the supervision of an employee of the site and the employee is responsible for final verification of the data and releasing it to the LIS (laboratory information system).

5. **Professionalism**:
    a. recognize appropriate professional conduct and practice such conduct when dealing with patients, physicians, and other health care professionals;
    b. recognize the need to, and practice the regular reading of journal articles;
    c. attend professional meetings, continuing education programs and seminars, and encourage others to attend also;
    d. maintain professional memberships and actively recruit new members;
    e. demonstrate knowledge of management and education theory and realize that application of this theory increases with work experience.

ACADEMIC AND GRIEVANCE POLICIES

Introduction

The sixty-six (66) hours of credit offered in the Clinical Laboratory Sciences Program at the University of Kansas Medical Center provide an opportunity for the student to acquire competence of a high standard in laboratory practice. Whereas, in his/her previous college courses, the student was concerned primarily with memorization of the course material and acquisition of a respectable grade, the clinical laboratory science student must, in addition, develop psychomotor and problem-solving skills. The courses demand time, effort, high standards of accuracy, and precision, all to be accomplished in a prescribed period.

The basis for evaluation of student performance in each course will be included in the course syllabus and provided to the student at the beginning of the course.

The Clinical Laboratory Sciences student is required to take a comprehensive examination over all professional coursework in CLS 650 Clinical Laboratory Science Review (Clinical Concentration) or CLS 655 Molecular Biotechnology Review (Molecular Biotechnology Concentration). The examination is given after the completion of all other CLS courses for the respective Concentration. The examination is similar to a national certifying examination both in content and number of questions per subject. A grade of 60% on the comprehensive exam is required for successful completion of the course.

Post-graduation assessment of competency is measured by a national certifying examination. Successful completion of the exam is recommended for employment and to assure the patient and health care providers the highest quality of laboratory service. *Passing the certifying exam is not required for graduation from the program or degree award.*

The rules and regulations of the School of Health Professions of the University of Kansas pertaining to academic policies, grade, tests, examinations and final examinations are published in the SHP Student Handbook. It is the student's responsibility to read these policies and as well as the policies for the Clinical Laboratory Sciences department. Specific academic standards for students in the Clinical Laboratory Sciences department follow below. Read "The Grading System" for the University of Kansas policy on Incompletes.

Academic Standards

Students in good standing will achieve the following during both years of the professional programs:

1. Maintain a minimum cumulative grade point average (GPA) of 2.30 in all CLS courses. Failure to maintain this academic standard will result in academic probation.
2. Earn a minimum grade of "C" or better in all courses.

If Immunology and Biochemistry are not completed prior to starting the program, CLS 538 Immunology and CLS 600 Biochemistry must be passed in the first semester of the program with a grade of "C" or above. This requirement has been set because these two courses consist of core knowledge that is required for success in the remaining CLS courses. If this requirement is not met, the student will not be allowed to continue in the program and will be suspended until both classes have been successfully completed. If this requirement is not met, these courses must be successfully completed (either by retaking the failed course or completing an acceptable equivalent course) within one (1) calendar year. Failure to earn a grade of "C" or better on the retake will result in dismissal from the program. Following successful completion of the course the student will be readmitted to the program (most likely Spring semester the year following successful completion of the failed course). It is possible that the student may be on probation when readmitted to the program. If on probation at the time of readmission, the student would have to achieve a program cumulative GPA of at least 2.30 by the end of that semester in order to remain in the program.

CLS Courses (except CLS 538 and CLS 600, see above) for which the student receives a "D" or "F" must be repeated the next semester in which the course is scheduled, provided the cumulative GPA in the professional program is at least 2.30. The student will not be allowed to take the next course in the content series (e.g., CLS 546 after obtaining a grade of "D" or "F" in CLS 536;) until the course has been repeated with a grade of "C" or better. There is one exception to this policy: a student who receives a "D" or "F" in CLS 532 or CLS 533 can advance to CLS 542 or CLS 543. Students can repeat a course only one (1) time and must achieve a grade of "C" or better on the second try or they will be dismissed from the program. If a course must be repeated, both attempts are included in GPA calculations. A student cannot begin clinical practicums until all lecture and laboratory courses have been successfully completed.

Practical Exam Minimum Requirement: For laboratory courses in which practical exams are offered, a minimum average of 70% is required on the practical exams to earn a passing grade (i.e., C or higher). If the practical exam average is less than 70%, the maximum grade for the course will be a **"D"** and the entire laboratory course must be repeated the next time it is offered.

Students will be notified in writing when they have failed to maintain the above Academic Standards.

Probation

A student will be allowed to enroll on a probationary status for one semester only. Good standing will be achieved by attaining a cumulative grade point average of 2.30 or above in the Clinical Laboratory Sciences coursework upon completion of the probationary semester. A Student not meeting academic requirements for two semesters (including summer session) are subject to dismissal. If a student who was on probation returns to regular status, a second probation will result in dismissal. Students being placed on probation will be notified in writing.

Summary of Grounds for Dismissal Due to Poor Academic Performance

- failure to maintain a cumulative program GPA of at least 2.30 for more than one semester
- earning two (2) grades less than a "C" in the same course

Academic Accountability Procedure

PART A

1. A student who scores 70% or less on any exam must meet with the instructor to identify academic obstacles that may be interfering with their success. Documentation of this meeting is required.

2. The student must schedule an appointment with a learning specialist in the Counseling and Educational Support Services office in Dykes Library to address their academic challenges and develop an action plan to improve their performance. Documentation of this visit is required.

NOTE: These two actions are required for the student to be eligible for the Intervention/Remediation Process outlined in Part B of this policy Statement.

Academic Accountability Procedure - *continued*

PART B

Intervention/Remediation (I/R) Process:
Initiated when students receive a course grade lower than "C" in any CLS lecture course. Laboratory courses and clinical practicums cannot be remediated. For CLS lecture courses, the following remediation procedures apply:

1. Faculty will assign an Incomplete for the course at the end of the semester.
2. The Program Director will communicate with the student regarding the Intervention/Remediation process and plan.
3. The student will spend the interval between semesters independently studying the course material for which they did not receive an acceptable grade (i.e., "C" or better).
4. *No later than three (3) working days before the start of the next semester* the student will take a multiple-choice comprehensive exam and score at least a 70% to pass the test. The maximum grade the student will then receive for the course will be a "C". The number of questions on the exam will be a function of the number of credit hours for the course (35 questions for each credit hour). Upon successful passage of a remediation exam, the Incomplete will be replaced with a C regardless of the remediation exam score.
5. If the student fails to successfully pass the remediation exam, the student will retain the grade originally earned for the course (e.g., "D" or "F"). If this is the first "D" or "F" earned in the course, the student must then retake the course the next time it is offered. If a course is repeated and a grade of less than "C" is earned, that course cannot be remediated a second time, and the student will be dismissed from the program.
6. Students cannot begin any clinical practicums until all lecture and laboratory classes are successfully completed.

Comprehensive Examination Policies

The Clinical Laboratory Sciences student is required to take a comprehensive examination over all professional coursework in CLS 650 Clinical Laboratory Science Review or CLS 655 Molecular Biotechnology Review. The examination is given after the completion of all other CLS courses, including practicum courses.

The Clinical Laboratory Science student must earn a minimum score of 60 percent on the comprehensive exam to graduate from the program. If a student does not achieve an overall score of 60% or greater, the student is required to take a repeat exam within 72 hours. The repeat exam only will include the content areas for which the student achieved a subject score of less than 60%. If required to take a repeat exam, a student must receive at least an overall 60% average (including the passed content areas from the prior attempt) to pass the comprehensive exam. The highest grade that can be earned by someone who must take a repeat exam is a "D". Failure to achieve a passing score on the comprehensive exam will result in dismissal from the program.

Academic Misconduct

As cited in the School of Health Professions Student Handbook, **academic misconduct includes, but is not limited to**:

- giving, receiving, or utilizing unauthorized aid on examinations, assignments, preparation of notebooks, themes, reports, projects, and/or other assignments or undertakings;
- misrepresenting the source of academic work;
- plagiarism;
- copying from a textbook or class notes during a closed book exam;
- taking a test or writing a paper for another student;

- securing or supplying in advance, a copy of an exam without the knowledge and consent of the instructor;
- using non-approved technology during an exam;
- falsifying clinical hours or student data
- during clinical education, engaging in any unprofessional behavior, inappropriate acts or omissions which place the patient in jeopardy;
- during clinical education, concealing and not reporting any illegal, unethical, fraudulent or incompetent acts of others;
- during clinical education, committing any breach or violation of the confidence of a person being served;
- committing unethical practices in conducting and/or reporting research.

Electronic Devices Policy

Examination policies:

a. students will be required to use the calculators provided by the program during examinations. A mobile phone, smart watch, or a similar device cannot be used as a calculator.
b. in addition to the mobile phone, other personal electronic devices include, but not limited to, smart watches, recorders, digital cameras, and MP3 players. Any electronic device that is capable of recording, copying, imaging, playing back, or recovering data are to be turned off and out of sight during examinations. Electronic devices used inappropriately for the purposes of cheating or academic dishonesty will cause the student to be penalized appropriately under the Academic Misconduct policy of the School of Health Professions.
c. in addition, students will be required to place phones, smart watches, backpacks or other totes in the front of the classroom, remove hats and/or bulky clothes, and have their drink containers checked before examinations.

Laboratory Courses:

d. because of the risk of contamination with biological materials; all personal electronic devices must be left in your locker or placed in a lock box during laboratory classes. The instructor may give a student permission to keep his or her mobile phone turned on, but set outside the lab, if extenuating circumstances exist where it is necessary for a student to be contacted by an outside party.

Lecture Courses:

e. personal computers/tablets/etc. may be used for note taking during lecture classes only if permitted by the instructor.

Plagiarism.

The Dykes Library page on “Plagiarism” states that plagiarism involves one or all the following:

- Using other people’s text or ideas in writing without citation of the original source
- Submitting a paper written by someone else, either downloaded on-line or from a friend who took the same class
- Paraphrasing sources with an inadequate citation
- Failing to provide a citation when information is not common knowledge

Students must be aware that plagiarism is a very serious form of academic misconduct that can result in immediate dismissal from the program. Students should familiarize themselves with the various forms of plagiarism by visiting sites such as:

- Plagiarism Website
- KU Med Library guide to Plagiarism

Failure to abide by regulations or acts of academic misconduct may result in admonition, warning or censure and, in addition, may subject the student to reduction of grade, disciplinary probation, suspension, or expulsion in accordance with School of Health Professions policies.

Non-Academic Misconduct

Students and student organizations are expected to conduct themselves as responsible and professional members of the university community. Nonacademic misconduct includes any violation of the university

policy on prevention of alcohol abuse and drug use on campus and in the workplace as well as any other published University policies applicable to School of Health Professions students.

While on University premises or at university-sponsored or supervised events, students and organizations are subject to disciplinary action for violations of published policies, rules, and regulations of the university and Kansas Board of Regents, and for the following offenses:

A. Failure to comply with CLS Program Affective Objectives stated previously in this handbook.

B. Offenses Against Persons include, but are not limited to, the following:
When a student:

1. Threatens the physical health of another person; places another person in serious bodily harm; uses physical force in a manner that endangers the health, welfare, or safety of another person; or willfully, maliciously, and repeatedly follows or attempts to make unwanted contact with another person (students, patients, visitors, faculty, staff, co-workers).
2. Exhibits inappropriate sexual behaviors with students, patients, visitors, faculty, staff, or co-workers.
3. Possesses or carries any firearm, weapon, or explosive on University premises.
4. Falsely reports a bomb, fire, or other emergencies.
5. Is convicted of a misdemeanor or felony involving crimes against persons (e.g. assault, battery, physical or sexual abuse).*
6. Is convicted of a misdemeanor or felony related to moral turpitude (e.g. prostitution, public lewdness/exposure, etc.).*

**In this context, "conviction" is intended and understood to include pleas of guilty, pleas of nolo contendere, and diversion agreements.*

C. Offenses Against Property include, but are not limited to, the following:
When a student:
1. Knowingly and without proper consent or authorization has in his or her possession the property of another person, the University, or any clinical site.
2. Knowingly and without proper consent or authorization removes, uses, misappropriates, or sells the property of another person, the University, or any clinical site.
3. Willfully or maliciously damages or destroys property owned or in the possession of another person, the university, or any clinical site.
4. Obtains the property of another person by misrepresentation or fraudulent means.
5. Misuses, damages, or alters any firefighting or other safety equipment.
6. Enters the facilities of, or uses the property of another person, the University, or any clinical site without proper consent or authorization.
7. Knowingly, and without proper payment, uses the services of the University or any clinical site that require payment of a charge.

D. Offenses Against the Orderly Process of The University may be committed, but are not limited to, the following:
When a student:
1. Intentionally causes or attempts to cause a substantial disruption or obstruction of classroom or clinical teaching, research, administration, disciplinary proceedings, other University learning activities, or other authorized, permitted, or constitutionally protected activities on University premises, including employment, recruitment, and public service functions.
2. Knowingly furnishes false information to the University, faculty, or staff; or a student, applicant, or former student forges, alters, misrepresents, or misuses University documents, records, or instruments of identification.
3. Misuses computing resources in violation of university policy

E. Offenses by a Student Organization or Campus Organization
Organizations may be held responsible for conduct in accordance with guidelines applicable to individual students. Organizations may be held responsible for their conduct determined to be a recognized group activity regardless of location (on or off University premises) or University supervision or sponsorship. Organizations may be sanctioned in a manner suitable to circumstances, similar to those outlined for individual students.

F. Other offenses include, but are not limited to, the following:
When a student:

1. Is convicted of a misdemeanor or felony for the sale, possession, distribution, or transfer of narcotics or controlled substances.*
   **In this context, "conviction" is intended and understood to include pleas of guilty, pleas of nolo contendere, and diversion agreements.*
2. Is impaired or under the influence of alcohol or other drugs while in clinical settings or on University premises.
3. Displays unprofessional dress.
4. Misses a clinical experience without notice and a valid reason, or leaves a clinical experience without notice and a valid reason.
5. Uses University broadcast email for personal purposes (e.g., to sell a personal item or promote a non-KUMC event. (Per the University of Kansas Medical Center Operational Protocol: Email)
6. Commits any other acts or omissions which, if the student were a credentialed practitioner, could result in discipline by the credentialing agency.

Actions Related to Academic and Non-Academic Misconduct

If, following the program policies and procedures regarding due process, a student is found to have violated regulations or to have engaged in academic or nonacademic misconduct, the student may receive admonition, warning or censure and/or be subject to reduction of grade, academic or disciplinary probation, suspension, or dismissal. Sanctions for academic misconduct or non-academic misconduct should be determined and imposed to maintain the integrity of the academic program and the rights of all individuals; maintain the mission of the University and its intellectual environment and to assist in the education of the student responsible for the academic or non-academic misconduct.

Types of sanctions include:

1. Warning: A formal written warning for the student's acknowledgment and signature; the signed warning to be placed in the student's department or program record.
2. Probation: Probationary status imposed with or without restrictions for a definite period of time not to exceed one calendar year. A student is subject to suspension or dismissal if involved in any academic or non-academic misconduct, including violations of the terms of the probation, while on probation.
3. Suspension: Involuntary separation of the student from the university for a definite period of time after which the student is eligible to return. The student is subject to immediate dismissal if involved in any subsequent act of misconduct after the suspension has been imposed and/or lifted.
4. Dismissal: Involuntary separation of the student from the University.

The Program Director shall obtain an acknowledgement for the student's file that verifies that the student has been informed of these regulations and conditions. The statement shall be signed and dated.

Guidelines for Circumstances of Academic or Non-Academic Misconduct

Each department defines the expectations of that department's students through the components of its written policies and the written statements of academic and non-academic misconduct. The department monitors each student's performance relative to these expectations.

Should students jeopardize their status in the department by not performing at the level expected and defined by the department, the student will be notified in writing that their student status is in jeopardy. This notification will take place within seven (7) working days from the time the department first becomes aware of the circumstances. This official written notification shall include the following information:

a. the reason the student is being so notified;
b. the potential consequences of the circumstances;
c. the timeframe in which the student may attempt to rectify the situation;
d. the steps necessary to rectify the situation;
e. the consequences of the successful or unsuccessful attempt to resolve the matter in the specified timeframe.

Grievance Procedure: Clinical Laboratory Sciences Department

1. If the student has, or anticipates, a problem relating to status in the program, the student should consult the student's advisor.
   a. If the problem is of a general nature and is serious, the student (and the student's advisor, if appropriate) should meet with the Program Director.
2. If the problem is with an individual faculty member, the student should communicate with the faculty member involved and together they should try to solve the problem.
   a. If the problem is not resolved within a week, the student, the student's advisor, the involved faculty member, and the Program Director shall meet within the next week and work to resolution. (*Note: at the discretion of the department, an extension may be granted. Documentation of this arrangement must be attached to the original notifications*). It is within the discretion of the Program Director to talk to the student, the student's advisor and the faculty member (alone or in a group) to reach a resolution before the scheduled meeting.
   b. At the time of the scheduled meeting within the second week, the student and the involved faculty member shall provide written documentation setting out problems and providing factual information in support of statements.
   c. If more time is needed, all parties may meet again at a specified date within a week.
   d. If all parties agree to a resolution the decision will be binding and settlement will be without prejudice.
   e. If the problem cannot be resolved among the parties, the Program Director will decide the issue.
   f. If the student or faculty member is dissatisfied with the resolution, either may seek the involvement of the Dean of the School of Health Professions.

      Note: It is the School of Health Professions policy that grievance procedures for grade disputes do not proceed beyond the department level.

Grievance Procedure: School of Health Professions

The grievance procedure may not be used as an appeal for a grade. Grades should be appealed at the department or program level. Appeals from the decision of a department or program regarding matters of academic or non-academic misconduct can be appealed to the School of Health Professions and the Dean of Graduate Studies.

Appeals procedures apply to situations in which the student wishes to appeal a proposed suspension or dismissal due to alleged misconduct. Procedures may only be pursued after all departmental procedures have been exhausted.

Proposals to suspend or dismiss a student for misconduct shall be sent from the department chair or program director, in writing, to the dean of the School of Health Professions, the vice chancellor for academic affairs, and to the student. The letter shall specifically recite those facts and circumstances relied upon by the program for recommending the proposed discipline. To access the SHP appeals procedure, the student must file, in writing, a Notice of Appeal to the dean of the School of Health Professions within two (2) weeks of the date of the chair's or program director's recommendation of discipline.

Please refer to the SHP Student Handbook for school-level performance and appeals processes.

English Language

ENGLISH LANGUAGE REQUIREMENTS FOR DEGREE PROGRAM: These requirements ***MUST*** be met ***PRIOR*** to beginning the Professional Program. Official documentation of scores must be provided to the admissions committee.

All students ***MUST*** satisfy at least ONE of the following requirements.

- be a natural born citizen of a country where English is the native language; e.g.; United States, Great Britain, Australia, New Zealand or English-speaking provinces in Canada;

- earned a baccalaureate degree or higher from an institution in one of the countries listed above;
- successfully passed (within the last two years) the academic format of the ***International English Language Testing System*** (IELTS);
  - minimum requirements: overall band score of 7.5 and no part score lower than 7.0;
- successfully passed (within the last two years) the ***Internet Based TOEFL;***
  - minimum requirements: at least 23 or higher on the Reading and Listening Sections; a score of 5.0 or 23 or higher on the Writing Section; a score of 26 or higher on the Speaking Section;
- successfully passed (within the last two years) ***the Paper-based TOEFL;***
  - minimum requirements: at least 57 on each section with a 5.0 or higher on the ***Test of Written English;***
- earned a minimum score of 50 or the ***TSE*** (Test of Spoken English) exam or a minimum of 50 on the ***Speak Test*** (available at the AEC, Lawrence campus).

Reference Books

The final grade in a course will not be given until all books loaned to the student for study are returned to the instructor or library.

Credit by Examination of Clinical Laboratory Sciences Courses Program

1. Credit by examination is available only for laboratory courses and phlebotomy.
2. Eligibility for credit in laboratory courses: student must hold current national certification as a medical laboratory technician (ASCP).
3. Credit by Examination:

   Student must enroll in the course and successfully pass a comprehensive examination with a score of 70% or better. Course credit appears on the transcript as a letter grade corresponding to score on the comprehensive exam as consistent with the grading scheme for the course.

   Courses eligible for credit by examination include:
   CLS 520 Phlebotomy
   CLS 531 Clinical Chemistry, Urinalysis, and Body Fluids Laboratory
   CLS 533 Clinical Microbiology I Laboratory
   CLS 537 Hematology I Laboratory
   CLS 539 Fundamentals Techniques & Clinical Immunology Laboratory
   CLS 543 Clinical Microbiology II Laboratory
   CLS 545 Immunohematology I Laboratory
   CLS 547 Hematology II Laboratory

4. A student applying for credit by examination in phlebotomy (CLS 520) must satisfy one of the following experience requirements as well as successfully pass the examinations for the course with a score of 70% or better.
   a. one (1) year continuous employment using phlebotomy skills approved by the Curriculum Committee, with written documentation of the phlebotomy experience by the individual's direct supervisor for the work experience;
   b. current employment as a phlebotomist with written documentation from direct supervisor as to the number of hours worked each month;

5. Students who can provide documentation of current certification as a phlebotomist (ASCP, ASPT, or NPA) are exempt from CLS 520 Phlebotomy course.

Special Phlebotomy Requirements

Students will not be excused from phlebotomy practice for disabilities or health reasons. Their participation in the phlebotomy practice may be modified to fit their disability. Each student request will be handled on an individual case basis. If the student is restricted for health reasons by the KUMC student health physician, the student will complete a comparable project that has been approved by the Curriculum Committee.

Student Exposure Protocol

KU Medical Center's procedures for students who are injured or exposed (mucous membranes or open skin) to blood, body fluids or other infectious material via needle stick or splash can be found at this site.

Students, if injured or exposed (on mucous membranes or open skin) to blood, body fluids, or other infectious material via needle stick or splash while performing duties at an Outside Facility should:

A. Follow procedures consistent with the institution and report to nearest emergency room, if applicable.

B. Student or supervisor calls Student Health (913-588-1941) and leaves a message regarding the incident (student name, date, and time). Fill out Student Incident Form.

C. A student health representative will work with the outside agency to assess risk factors and plan follow-up care.

Student Mentoring

Each CLS student is assigned a faculty mentor. The CLS Mentor Program has been developed so that individual students can form a closer professional relationship with a laboratory professional than may be achieved by just attending class. In addition to receiving guidance on academic progression, students can receive guidance in career related areas, as well as personal and professional development. Furthermore, these meetings will assist faculty in detecting potential problems or difficulties encountered by students before they can negatively impact student performance in the program. The meetings will provide the student with a chance to express concerns about his or her performance or issues related to the program. Student advising and mentoring occurs while maintaining confidentiality and impartiality.

At a minimum, mentoring meetings should occur along the following schedule:

- Year 1 fall semester: early September, early October, and mid-November
- Year 1 spring semester: late February, mid-April
- Year 2 fall semester: midterm
- Year 2 spring semester: as desired by the student or faculty mentor

PROGRAM POLICIES

Informed Consent

Clinical laboratory professionals are qualified by academic and applied science education to provide service and research in clinical laboratory science and related areas in rapidly changing and dynamic healthcare delivery systems. As part of the educational process to become qualified to perform the full range of clinical laboratory tests in areas such as hematology, clinical chemistry, immunohematology, microbiology, immunology, coagulation, molecular, and other emerging diagnostics, students will be exposed to blood, blood products and body fluids of others. Additionally, blood may be collected from students for use in the performance of laboratory tests. Students may give consent for their blood samples to be used by the University of Kansas Hospital Clinical Laboratory for normal range determinations. Information regarding universal precautions is included in the program curriculum. The program will make every attempt not to use infectious specimens as part of the educational process.

Attendance

Students in the Clinical Laboratory Science programs should become thoroughly knowledgeable with each course and professional criterion in preparing for a career in the clinical laboratory sciences.

Class attendance is required because the complex material presented is essential for the development of the student in the professional program. Lab and practicum assignments require actual performance of procedures and/or application of principles. The manner or method of performance needs reinforcement. All assignments and course objectives must be completed to the satisfaction of the instructor.

1. **Tardiness**:
    a. the student should adhere to the time set by the Department for class attendance. More than 15 minutes late shall constitute an absence;
    b. If the student realizes that he/she may be tardy to lecture, lab, or practicum site they should attempt to inform the instructor before class begins by phone call (leaving a message if no answer), email, or by contacting the department's Administrative Assistant. This notification may prevent the tardiness being recorded as an unexcused absence. If the student is unable to notify the instructor before class begins, they should inform the instructor at the end of the class period, giving the reason for the tardiness.

2. **Absence**:
    a. **Lectures** – students are expected to attend all lectures sessions; in the event of serious illness or family emergency, they must inform the instructor before class begins by phone call (leaving a message if no answer), email, or by contacting the department's Administrative Assistant. Five percent (5%) will be deducted from the final grade ***each time*** absences are equal to the number of credit hours for that class. For example, CLS 540 is 2 credits; if two (2) classes are missed a 5% deduction will occur, if four (4) classes are missed a 10% reduction will occur. As stated in the Student Handbook, being more than 15 minutes late will be considered an absence. Generally, there are no make-ups for quizzes or exams. Should a quiz or exam be missed, a separate exam may be allowed. At the discretion of the instructor, proper documentation for the absence may be required. The instructor will determine if the exam can be taken, (meaning the cause for absence is acceptable) and which proper documentation is required. This will be dependent upon the cause for the absence. The exam will be scheduled at the convenience of the instructor. ***Excused absences will only be granted when a student follows policy and are given at the discretion of the instructor***.

    Student Labs – students are expected to attend all student lab sessions; in the event of serious illness or family emergency, they must inform the instructor before class begins by phone call (leaving a message if no answer), email, or by contacting the department's Administrative Assistant. Upon returning to class, it is the student's responsibility to contact the faculty member to determine if that lab can be made-up (not all labs can be made up). In

most courses, material covered in early lab sessions teach principles needed by the student in later labs, but many labs are impossible to repeat.

Practicum Rotations – students are expected to attend all practicum sessions. If you are ill and cannot attend a day during practicum rotations you must (i) call the practicum rotation site first thing in the morning to let them know you will not be present, and (ii) email the CLS instructor for that practicum. This notification is important since your practicum site will have specific activities planned for you. Students should remember that off-site experiences are part of the practicum rotations. The student must be there. In the practicum rotations, the maximum number of excused absences (illness or family emergency) permitted in a class is equal to the number of credit hours for that class (e.g., CLS 643 is 3 credits so there are no more than 3 excused absences permitted). Any number of absences (whether due to illness or not) greater than the number of credit hours is expected to be made up on weekends, breaks or staying at the end of the school year for the additional time. Failure to make up time will result in a grade reduction of 5% for every day not made up. No excused absences will be allowed on practicum rotations of less than 10 days; this includes absences occurring during off-campus rotations. No employment interviews should be scheduled during these rotations.

b. If a student must be absent for three days or less because of extenuating circumstances, they must notify the Instructor and the CLS department prior to the time the class(es) are scheduled to begin. If a student must be absent for greater than three days, he/she must submit a petition to the clinical Laboratory Science Program Director prior to the date the leave would commence. In addition, prior to starting the leave, the student must have received written approval from the program director and all faculty affected by the student's absence. After approval of the leave, the faculty and student will arrange a mutually agreeable schedule for the student to complete the material missed due to the absence. This could include weekends and/or student vacation times.

c. Provision for make-up is at the discretion of the instructor. Appeals for special consideration may be addressed to the instructor involved and, if the appeal is not resolved, to the Program Director.

d. If a student must be absent for three (3) consecutive days due to an illness or injury they must submit to the Clinical Laboratory Sciences Program Director a resume slip from Family Practice or a private physician before attending classes.

e. A student having excessive absences may be withdrawn from the course by the Dean and assigned a grade of "F". In the Clinical Laboratory Sciences department excessive absence is defined as absence in excess of the number of credit hours in the course. Faculty members will file a report with the Program Director whenever a student has been absent without explanation for a consecutive number of days greater than the number of hours credit in the course. The Program Director will bring this continued absence to the attention of the KUMC Registrars Office. The presumption will be that the student has withdrawn from the course.

3. **Spring Break and the ASCLS-Kansas Annual Meeting**:

Spring Break:

a. *CLS3 (First Year) Students*: Spring break for CLS3 students follows the published spring break schedule for the University;
b. *CLS4 (Second Year) Students*: Due to the clinical practicum rotation schedule, CLS4 students do not receive Spring Break.

ASCLS-Kansas Annual Meeting: This professional meeting occurs during the spring semester at a date determined by the ASCLS-Kansas. The department strongly encourages all CLS4 students to attend this meeting while enrolled in the program. The department will pay the student registration fee in full for those CLS4 students who are current members of ASCLS-Kansas. Students who are not current members will be responsible for the difference in cost between the student member registration fee and the non-member student registration fee. CLS4 students are excused from their clinical practicum site to attend the meeting. Students not attending the meeting are to report to their clinical practicum site as regularly scheduled.

4. **Leave of Absence**:
    a. a student desiring to interrupt the professional curriculum with a maternity/medical leave may submit an application for a Leave of Absence to the Program Director. A leave of absence shall not exceed 12 months in length. The student may resume the program the next semester in which courses are scheduled, provided that the student meets the course prerequisites. Visit the Change Enrollment webpage for more information about the University leave of absence policy.

    b. a student desiring to interrupt the professional curriculum for any reason other than maternity/medical, may submit a petition to the Program Director.

5. **Note:**
    a. individual course requirements regarding attendance may be more restrictive;
    b. refer to the SHP Student Handbook for policies specific to the school. It is the student's responsibility to review the School of Health Professions policies.

JayDoc and Interprofessional Education Activities

Changes in the organization and delivery of health services are happening nationwide. Increased team-based care and communication practices are central to the effective delivery of patient-centered care in an environment of expanding access. These changes impact every aspect of the health care system, including the clinical laboratory. Therefore, as part of the KUMC campus-wide initiative to prepare health care practitioners who can deliver care as members of a collaborative team, the Department requires Clinical Laboratory Science students to participate in various interprofessional activities. These required activities include three campus-wide interprofessional education (IPE) events. Campus-wide IPE events occur during weekdays. The specific dates for these events will be announced as soon as the dates are set.

ALL CLS students are highly encouraged to participate in the staffing of the laboratory in the student-run JayDoc clinic for the duration of the program (http://jaydocfreeclinic.org). The JayDoc clinic operates in the evening (6PM-10PM), Monday through Wednesday, throughout the year. The CLS student JayDoc Coordinators facilitate CLS student staffing of the clinic's laboratory.

CLS Student Lockers

Lockers for student use are in the CLS department hallway, or elsewhere on the KUMC campus as required. Students may have to share a locker with another student. The policy regarding use of the lockers located inside the CLS Department is as follows:

1. Two students may be assigned to each locker. Each student will have a key.
2. If the key is lost, the student must pay the department $10.00 for a key replacement.
3. All keys must be returned to the CLS office according to the following schedule:
    a. CLS3 students – keep the key the whole year.
    b. CLS4 students:
        i. Clinical concentration students turn in their key prior to starting clinical rotations unless performing rotations at TUKHS (in which case, the key is turned in at the end of rotations).
        ii. Molecular concentration students turn in their key at end of clinical rotations.
        iii. Students completing both concentrations turn in their key prior to starting rotations associated with the second concentration (unless performed at TUKHS, see above).
4. No liquids that aren't in sealed containers.
5. No food or liquids are to be left in the lockers overnight.
6. No decorating the outside of the lockers.
7. Nothing should be placed on top of the lockers (fire marshal policies).
8. Students are responsible for always keeping their locker clean.

Housing During Practicum Rotations

There are multiple clinical affiliates where students complete their practicum rotations. Students need to be aware that they may be assigned to clinical rotation sites outside of the Kansas City Metropolitan area. Students are responsible for their own housing and meals during the clinical rotation semester no matter the location of the clinical rotation. Students need to consider this possibility when making their housing arrangements during the final year of the program. Students may want to obtain a lease that can be terminated or extended without penalty in the semester preceding the clinical rotation.

Grooming and Dress Standards

The University of Kansas Medical Center projects an image of professionalism in our community. The grooming and dress of our employees conveys a message of respect, credibility, and quality of service. In a hospital setting, appearance and cleanliness are extremely important in meeting the standards for infection control and safety. Employees have the opportunity to create a positive impression by consistently presenting themselves as models of cleanliness, modesty and conservative good taste.

Based on the practices of our clinical affiliates, the CLS program has adopted the following standards that should be practiced consistently:

Grooming Standards

- practice daily oral hygiene;
- bathe daily and use effective deodorant;
- heavily-scented toiletries should be avoided;
- fingernails should be clean, well-groomed and of a reasonable length;
    - ***in keeping with APIC standards, students may not wear: fingernails more than ¼ inch long, chipped nail polish, nail jewelry or artificial fingernails of any kind, including but not limited to tips, overlay wraps, extenders and press-on nails. Gel and shellac nails are also prohibited;***
        - ***according to the Association for Professionals in Infection Control (APIC) artificial nails or extenders have been found to harbor pathogenic organisms and have been implicated in the transmission of organisms to patients;***
    - ***this policy may apply to other positions at KUMC as determined by the Academic Department;***
- makeup should be conservative and in good taste;
- hairstyles as well as mustaches and beards should be clean, neatly groomed and moderate length; long hair must be tied back away from the face, and hair color must be natural looking;
- use of jewelry should be minimal and conservative; earrings cannot dangle or a hoop may not be over ¼ inch around.

Clothing Standards

- all garments must be fresh and clean;
- uniforms (scrubs) - as designated by respective department or specialty units;
- shoe soles should be non-marking and without metal caps. Laced or loafer-type shoes are preferred;
- shoes with open-toes or heels are prohibited for the student's personal safety;
- socks or hose must be worn;
- appropriate undergarments must be worn and are not to be exposed;
- laboratory:
    - navy solid-colored scrub pants and navy solid-colored scrub tops are to be worn in the student labs and in clinical settings (including practicum);
    - laboratory coats are worn over scrubs during student labs and during other designated activities. Lab coats are provided for student use;
- lecture:
    - unacceptable clothing is not allowed (see below regarding unacceptable clothing);
- professional meetings:
    - business casual.

Unacceptable Clothing

- flip-flops;
- tight-fitting or revealing garments, including tank tops, halter tops, crop tops, leggings, and miniskirts;
- worn, torn or soiled garments or shoes;
- items of clothing imprinted with advertising or objectionable language;
- baseball caps and other non-religious headwear.

Tattoos and Piercing Standards

- Visible tattoos should be covered if possible and are not to be offensive, vulgar, profane, or intimidating, and must not violate the University's anti-discrimination or harassment policy;
- Visible body piercings/jewelry worn on the tongue, lips, eyebrows and nose may not be worn in the clinical setting.

The preceding standards are not all inclusive. The Program Director and each instructor has the option to implement specific additional guidelines within the framework of this policy. If there is a question as to the appropriateness of a particular item, it should not be worn without consulting your instructor. Some clinical sites may have more stringent requirements than the CLS Department. When performing practicum rotations, students are expected to conform to the grooming and dress requirements of the supervisory setting. In the absence of site-specific policy, the above guidelines for grooming and dress should be observed.

A student may be asked to return home to change clothing on their own time. Failure to follow standards may result in disciplinary action.

Health

All students at KUMC are required to maintain health insurance coverage throughout their enrollment. The Kansas State Employees Health Care Commission endorses a policy for students at Kansas Regent Institutions. The plan is underwritten by United HealthCare Insurance Company and is better known as the Student Resources Plan. To reach Student Resources by telephone, call 1-800-237-0903. The policy may be downloaded at: http://www.studentresources.net. All questions relating to student health and health insurance should be directed to KUMC Student Health Services, not the Clinical Laboratory Sciences department.

A student must maintain physical, emotional, and mental health (well-being), which will permit them to meet the course and program objectives. Since accuracy and speed in performing laboratory procedures are critical in care and treatment of patients, programs must act, at all costs, to protect the health and safety of patients.

Students will not be excused from the clinical practicums for disabilities or health reasons. Their participation in the educational experience may be modified to fit their disability. Each student's request will be handled on an individual case basis. If the student is restricted for health reasons by the KUMC student health physician, the student will complete a comparable project that has been approved by the curriculum committee.

Service Work Performed by Students

Service work is the compulsory, or non-compulsory, performance of any clinical duties during scheduled clinical rotation hours without direct supervision by a certified technologist. Students are prohibited from performing service work or substituting for (compensated or uncompensated) any regular qualified staff employee at the clinical affiliate during the scheduled clinical practicum rotation (approximately 8:00AM – 5:00PM Monday through Friday). Any duties performed by the students at the clinical site are under the supervision of an employee of the site and the employee is responsible for final verification of the data and releasing it to the LIS (laboratory information system). At each clinical affiliate site, students shall perform duties, and demonstrate procedural competencies, as established by the given clinical rotation objectives and under the supervision of a certified technologist.

Occasionally, a student chooses to be hired by a clinical site for jobs that do not require a certified MLS or MLT and the employment is outside the scheduled class hours (e.g., evenings or weekends). In such cases, the student is a *bona fide* employee of the site, and the work is not considered to satisfy any part of the student's clinical practicum rotation.

HIPAA and Related Confidentiality Issues

Students are required to complete the online HIPAA course offered at KU Medical Center (KUMC). Prior to participating in the clinical practicum rotations, the student is required to sign a form whereby they agree to abide by the rules and regulations of the clinical sites utilized by the program while on their premises during any assigned clinical, research or enrichment rotations. Clinical sites other than KUMC may require the student to satisfy their specific HIPAA policies.

Required Annual Training

All new and continuing students campus-wide are required to take (and complete at the level of competency indicated on each) the following SABA training modules annually:

- Information Security Awareness
- HIPAA
- FERPA
- Occupational Safety
- Equal Opportunity Rights and Responsibilities
- Sexual Assault Prevention

New students must complete the modules between 30 days before the start date of their program and not later than two weeks after classes begin. New students must click the blue REGISTER button, then complete all courses on the list to complete the curriculum. For continuing students, the "window" to do the annual re-training on these modules starts in late September. Students who do not comply will not be allowed to enroll the following semester and will lose access to KUMC electronic resources.

To access SABA, students should log onto "myKUMC" using their Outlook user ID and password and go to the "The KUMC Learning Management System - Saba" link to complete these modules.

Background Check

On January 1, 2004, The Joint Commission (THC) instituted new regulations that must be followed in order for hospitals, home health agencies, clinics, etc., to gain or maintain accreditation status. One of these new regulations requires that all persons who are involved in patient care activities, i.e., employees, volunteers AND STUDENTS, must have criminal background checks and other healthcare-related checks. Most public/private school systems are requiring background checks as well.

Acceptance into the School of Health Professions academic programs is conditional, pending the results of a criminal/healthcare-related background check. Acceptance into the Clinical Laboratory Sciences Programs, School of Health Professions, will not be final until the School receives the student's background check information. The School of Health Professions requires only one background check prior to final acceptance and subsequent enrollment.

While most health care facilities with whom the School of Health Professions has affiliation agreements will accept the school's verification that a background check has been performed on a student, some may require a more current report and a drug screen. The cost of any additional screening may be the responsibility of the student.

Policies and Procedures When Applied Experience Cannot Be Guaranteed

The CLS Program diligently coordinates with clinical affiliates in the applied education of students enrolled in the Program. In the event that a site cannot participate in instruction, an acceptable, alternative site is identified, and the student is placed at that institution. The CLS Program guarantees that students will be placed in all required clinical rotations as long as the student is in good academic standing. However, when there are limited clinical rotations available because of clinical site constraints, there may be a delay in their schedule.

Course Evaluations

Course evaluation by students is part of the continuing course improvement process. Therefore, your participation is very important. The availability of course evaluations will be distributed by email the week prior to final examinations and are completed on-line by the last day of class. Participation is tracked; however, all student responses are anonymous and will only be presented to faculty as aggregate data. Due to accreditation requirements and the value that the CLS department places on these evaluations, your course grade will be withheld until the course evaluation is completed. All students are required to submit course evaluations for every course. No points are associated with the course evaluation in the determination of final course grades

Failure to complete a course evaluation will result in a grade of "I" (incomplete) being assigned until the course evaluation has been submitted. Once the instructor has been notified that a student has submitted his/her evaluation form, the grade will be changed.

Printing

The CLS Department copier is available only to department faculty and staff and students granted permission to use it by the Program Director. Visit the KUMC "Printing, Copying, Scanning & Faxing" webpage for information on printing availability on campus for students.

Examination and Grading Policies

All grades given in the CLS numbered courses are competency-based and NOT norm-referenced grades. This means that students are expected to achieve, at a minimum, a defined level of knowledge/competency in each course. Grades for exams and courses are NOT curved.

Examination questions are categorized according to Taxonomy Level. Taxonomy refers to the cognitive processes required to answer the question item. The construction of the stem and responses, utilization of visual materials as well as the process and content of the item all contribute to the classification of an item by taxonomy level. The following three (3) taxonomy levels are utilized by the CLS Program.

TAXONOMY 1: Recall

Ability to recall or recognize previously learned (memorized) knowledge ranging from specific facts to complete theories.

TAXONOMY 2: Interpretive Skills

Ability to utilize recalled knowledge to interpret or apply verbal, numeric, or visual data.

TAXONOMY 3: Problem Solving

Ability to utilize recalled knowledge and the interpretation/application of distinct criteria to resolve a problem or situation and/or make an appropriate decision.

The taxonomy level of an item is influenced by the construction of the stem in concert with the responses. Thus, the same bit of information could theoretically provide the criteria for the development of items on all three taxonomy levels. The following sample items demonstrate this point.

TAXONOMY 1: Recall

The prothrombin time test requires that the patient's citrated plasma be combined with:

a. platelet lipids
b. thromboplastin
c. Ca^{+2} and platelet lipids
d. Ca^{+2} and thromboplastin *(correct answer)*

TAXONOMY 2: Interpretation

A patient develops unexpected bleeding following three transfusions. The following test results were obtained:

Prolonged PT and APTT
Decreased fibrinogen
Increased fibrin degradation products
Decreased platelets

What is the most probably cause of these results?

a. Familial afibrinogenemia
b. Primary fibrinolysis
c. DIC (*correct answer*)
d. liver disease

TAXONOMY 3: Problem Solving

A patient develops severe unexpected bleeding following four transfusions. The following test results were obtained:

Prolonged PT and APTT
Decreased fibrinogen
Increased fibrin degradation products
Decreased platelets

Given these results, which of the following blood products should be recommended to the physician for this patient?

a. platelets
b. factor VIII
c. cryoprecipitate (*correct answer*)
d. fresh frozen plasma

Clinical Laboratory Sciences Department
University of Kansas Medical Center

Clinical Professional Evaluation

Student: _____ **Date:**_____

Rotation (discipline): _____ **Institution:**_____

It is our goal to ensure that students entering the clinical laboratory sciences profession do so with comprehension of behavioral standards expected. Circle the number corresponding to the student's performance in each category using the following scale.

	1	2	3	4	5
	Fails to meet standards	Below Standards	Meets Standards	Above Standards	Exceeds Standards
If you give all of this number it correlates to a grade of:	F	60% - D	70% - C	85% - B	100% - A

Entry-level expectations definition: analogous to a new graduate without experience who you think would be a competent employee after completing your department's normal orientation for new employees.

1. **Fails to Meet Standards**: Performance is **significantly** below entry-level expectations. Performance is unacceptable.

2. **Below Standards**: Performance is **marginally** below entry-level expectations. Student needs to improve to achieve entry level competencies.

3. **Meets Standards**: Consistent in meeting entry-level expectations.

4. **Above Standards**: Consistent in meeting entry-level expectations. Student performance demonstrates initiative and independent functioning. Student may excel in some areas.

5. **Exceeds Standards**: Consistently exceeds entry-level expectations. Student demonstrates exceptional initiative and independent functioning.

6. **N/A**: Not applicable. No opportunity to evaluate criteria. Please mark "NA" across the rating scale if there has been inadequate opportunity to evaluate an attribute.

I. Initiative and Interest

Actively participates in performing assigned tasks	1 2 3 4 5
Follows instructions and asks appropriate questions	1 2 3 4 5
Prepared for the day's laboratory assignment	1 2 3 4 5
Self-starter in appropriate situations	1 2 3 4 5

II. Responsibility

Complies with institutional policies and procedures	1 2 3 4 5
Is accountable for assigned work	1 2 3 4 5
Recognizes limitation, seeking help when needed	1 2 3 4 5

III. Adaptability

Accepts constructive criticism and modifies behavior	1 2 3 4 5
Adjusts workflow appropriately in emergency situations	1 2 3 4 5
Adapts site-specific protocols to generic tasks	1 2 3 4 5
Adjusts to unplanned changes in schedule or assignment	1 2 3 4 5

IV. Knowledge

Demonstrates understanding of basic theory	1 2 3 4 5
Demonstrates understanding of medical significance of testing results	1 2 3 4 5
Integrates knowledge gained prior to the practicum to its application within the clinical rotation	1 2 3 4 5
When applicable, integrates lab results & information from other disciplines with results obtained in this clinical rotation	1 2 3 4 5
Identifies problems, errors, or malfunctions (at entry level)	1 2 3 4 5
Creatively addresses problems that have no standard solution or approach	1 2 3 4 5

V. Technique

Applies theoretical principles to current task	1 2 3 4 5
Completes assigned tasks within an acceptable time frame	1 2 3 4 5
Requires minimal supervision	1 2 3 4 5
Reports accurately and efficiently	1 2 3 4 5
Demonstrates appropriate trouble-shooting skills (entry level)	1 2 3 4 5

VI. Professional Standards

Arrives at assigned time and remains until work is completed	1 2 3 4 5
Complies with institutional safety policies and procedures	1 2 3 4 5
Maintains patient confidentiality as directed by HIPAA	1 2 3 4 5
Maintains a clean and orderly work area	1 2 3 4 5
Presents a professional appearance	1 2 3 4 5
Promotes a cordial work atmosphere, treating others with courtesy and respect	1 2 3 4 5
Demonstrates integrity - admitting mistakes and taking corrective measures	1 2 3 4 5

Overall Performance Summary 1 2 3 4 5

1. Would you hire this person for an open position in your laboratory if you had the authority to do so?

2. If you or your family were a patient in this facility, how would you feel about having this individual perform your laboratory testing (assume completion of standard new-employee competency assessment as conducted in your lab)?

3. **General Comments:**

Evaluated by: _____

Signature

_____

Title

_____

Date

VALUABLE WEBLINKS

KUMC STUDENT HANDBOOK – GENERAL INFORMATION

See: http://www.kumc.edu/student-handbook.html

SCHOOL OF HEALTH PROFESSIONS STUDENT HANDBOOK

See: https://www.kumc.edu/school-of-health-professions/academics/student-handbook.html

KUMC EQUAL OPPORTUNITY OFFICE

See: http://www.kumc.edu/compliance-services/office-of-compliance/equal-opportunity-office.html

STUDENT HEALTH SERVICES

See: http://www.kumc.edu/student-affairs/student-health-services.html

CHEMICAL HYGIENE PLAN / HAZARDOUS MATERIAL MANAGEMENT PLAN

See: https://kumc.policystat.com/policy/7194664/latest/

KU MEDICAL CENTER NO-SMOKING POLICY

The KUMC campus is smoke-free and the use of tobacco products is prohibited inside and outside - anywhere considered to be a part of our campus property.

GUIDELINES FOR SOLICITING AND SELLING

See: https://kumc.policystat.com/policy/6241283/latest/

SCHOOL OF HEALTH PROFESSIONS SOCIAL MEDIA POLICY

See: https://www.kumc.edu/school-of-health-professions/academics/student-handbook.html#socialmedia

KU MEDICAL CENTER WEAPONS POLICY

KU Medical Center prohibits faculty, staff, students, and visitors from carrying weapons of any type on its Kansas City, Kansas campus. For additional information, please see the KU Medical Center procedures for implementing university-wide weapons policy.