Clinical Laboratory Science Program Mission Statement

In accordance with the mission of the UTEP College of Health Sciences, the UTEP Clinical Laboratory Science Program (CLS) seeks to provide competent Clinical Laboratory Scientists that will fulfill the current and future demands of the U.S. – México border populations and other areas throughout the United States.

The CLS Program is committed to providing high quality educational experiences that develop knowledgeable, skillful, and ethical professionals who will fulfill leadership positions and contribute to the international growth and advancement of the health care community.

The UTEP CLS program is also dedicated to the pursuit of scholarly endeavors, continuing education, service and lifelong learning.
Clinical Laboratory Science Program Goals

Program Goals. The Clinical Laboratory Science Program seeks to prepare entry level clinical/medical laboratory scientists (CLS/MLS) who are competent, demonstrate professionalism reflective of the standards of practice and code of ethics which underlie the profession, and continue to learn throughout their professional career.

The UTEP CLS Program strives to:
- Prepare entry level clinical laboratory scientists who will competently and ethically perform diagnostic laboratory testing with the purpose of contributing to the improvement of the population’s health and wellness.
- Provide students with the necessary knowledge and experience to qualify for national MLS certification examinations
- Provide opportunities for professional development to enhance students’ motivation to continue the pursuit of lifelong learning by regularly participating in continuing education activities and programs.
- Prepare students to become leaders in the medical laboratory profession within technical, educational and administrative roles.

Research Goal. Novel and translational research that addresses pertinent questions in the clinical and basic sciences is critical to align the UTEP CLS program with the scholarly mission of the College of Health Sciences, UTEP and the UT System. The CLS program faculty will engage in scholarly pursuits that seek to develop new knowledge and strategies with the potential to decrease health disparities, improve health equity, and that align with the objectives of the Healthy People 2020 initiative.

Service Goal. Service at all levels (program, department, college and university) plays an integral role in the mission of the CLS program. The program faculty and students will actively engage in service to the university, professional organizations, and public and private health agencies, especially those within Hispanic and border communities.

A NATIONALLY ACCREDITED PROGRAM
Accredited by the
National Accrediting Agency for Clinical Laboratory Sciences
5600 N. River Road, Suite 720,
Rosemont, IL 60018-5199

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Welcome to the UTEP College of Health Sciences and the Clinical Laboratory Science Program.

DESCRIPTION OF THE MEDICAL LABORATORY SCIENTIST PROFESSION
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 multilevel 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.

DESCRIPTION OF ENTRY LEVEL COMPETENCIES OF THE 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, 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.

Clinical Laboratory Scientists are competent in:

- Developing and establishing procedures for collecting, processing, and analyzing biological specimens and other substances;
- Performing analytical tests of body fluids, blood cells, and other substances;
- Integrating and relating data generated by the various laboratory departments while making decisions regarding possible discrepancies;
- Confirming abnormal results, executing and verifying quality control procedures, and developing solutions to problems concerning the generation of laboratory data;
- Evaluating quality control results and quality assurance measures, and instituting proper procedures to maintain accuracy and precision;
- Establishing and performing preventive and corrective maintenance of equipment and instruments as well as identifying appropriate sources for repairs;
- Developing, evaluating, and selecting new techniques, instruments and methods in terms of their usefulness and practicality within the context of a given laboratory’s personnel, equipment, space and budgetary resources;
- Demonstrating professional conduct and interpersonal skills with patients, laboratory personnel, other health care professionals and the public;
- Establishing and maintaining continuing education as a function of growth and maintenance of professional competence;
- Providing leadership in educating other health personnel and the community;
- Exercising principles of management, safety, and supervision;
- Applying principles of educational methodology, and
- Applying principles of current information systems.
**UTEP CLS Program Learning Objectives:**

Graduates of the CLS program will be prepared for successful careers in the Medical Laboratory or related areas of further study by demonstrating:

1. Specific knowledge of theory underlying laboratory testing using analytical, interpretative, and critical thinking skills consistent with entry-level medical laboratory science practice.

2. Appropriate techniques for laboratory procedures from simple to complex including pre-analytical, analytical and post-analytical interpretation.

3. Commitment to all laboratory regulations, confidentiality and quality assurance practices.

4. Effective communication in a variety of styles to varying audiences.

5. Professional and ethical behaviors when working as a member of a diverse health care team.

6. Effective use of basic management, education and research skills

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<tr>
<th>CLS LEARNING OBJECTIVES</th>
<th>SELECTED COURSE ASSIGNMENTS</th>
<th>ASSESSMENTS</th>
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</table>
| 1. Demonstrates knowledge of theory underlying laboratory testing using analytical, interpretative, and problem solving skills. | ALL CLS COURSES | Exams and quizzes  
All students must achieve a minimum of 75% final grade in all didactic classes.  
All students must achieve a minimum of 75% final grade in all preceptorship (clinical) classes. |
| 2. Performs laboratory procedures from simple to complex, including specimen collection and processing, analysis, interpretation, and use of quality assurance procedures | A. All CLS Lab courses  
B. Preceptorships | A 1. Pre and Post lab quizzes  
A 2. Lab practical exams  
A 3. All students must achieve a minimum of 75% final grade in all lab courses  
B 1. Clinical performance evaluation  
B 2. All students must achieve a minimum of 75% final grade in all preceptorship (clinical) classes |
| 3. Demonstrates commitment to all laboratory regulations, confidentiality and quality assurance practices | A. All CLS lab courses | A1. Safety quiz  
A2. Safety and biohazard certificate form UTEP environmental Health and Safety office  
A3. Lab practical exams |
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<tr>
<th></th>
<th>B. Preceptorships</th>
<th>B. Clinical performance evaluation</th>
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<td>4. Communicates in a variety of styles to varying audiences.</td>
<td>A. Oral presentations and group projects in first year CLS didactic courses</td>
<td>A. Evaluation rubrics</td>
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<td></td>
<td>B. Oral and written presentations in CLS Education class</td>
<td>B. Evaluation rubric</td>
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<td>C. Computer usage at clinical sites</td>
<td>C. Clinical performance evaluation</td>
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<td>5. Demonstrates professional and ethical behavior.</td>
<td>A. Attendance and punctuality expectations on campus and at clinical sites</td>
<td>A. Attendance recorded in classes and at clinical site</td>
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<td>B. Completion of course assignments by due dates</td>
<td>B1. Grading rubric and recording for didactic courses and preceptorship</td>
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<td>C. Maintaining regular communication with program faculty and following through with recommendations</td>
<td>B2. Clinical performance evaluations</td>
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<td>D. Rigorously practicing all safety procedures</td>
<td>C1. Mentoring sessions with CLS Faculty</td>
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<td>C2. Clinical performance evaluations</td>
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<td>D1. Documentation of unsafe practice</td>
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<tr>
<td></td>
<td></td>
<td>D2. Clinical performance evaluations</td>
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<tr>
<td>6. Demonstrates effective use of basic management, education and research skills.</td>
<td>A. Discuss components of laboratory supervision and education.</td>
<td>A. Discussions in education, management, and research classes</td>
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<td>B. Prepare objectives and test questions to accompany a presentation</td>
<td>B. Grading rubric homework and capstone education project</td>
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<td>C. Prepare a research proposal / presentation</td>
<td>C. Research course assignments and poster presentations.</td>
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</table>
Learning Outcomes

1. Students will demonstrate entry-level medical laboratory science skills at or before the completion of didactic coursework prior to entering clinical rotations by achieving a minimum of 75% final grade on all classes.

2. Second year professional phase students will demonstrate entry-level skills at or before completion of their preceptorship in all three NAACLS enforced learning domains in 4 major areas (microbiology, clinical chemistry, hematology, immunohematology) and 3 minor (serology, body fluids, coagulation) CLS core competency areas by achieving a minimum of 75% final grade on all preceptorship classes.

3. Students will be able to demonstrate knowledge, skills, and abilities to perform, interpret, and report-out patient clinical laboratory test results as a clinical laboratory scientist by utilizing their skills and knowledge in community based health fair capstone projects.

Clinical Laboratory Science Program

Program Accreditation:
The UTEP Clinical Laboratory Science program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

National Accrediting Agency for Clinical Laboratory Sciences
5600 N. River Road, Suite 720,
Rosemont, Illinois  60018-5119
Ph:(773)714-8880
info@naacls.org    http://www.naacls.org

The Program at the University of Texas at El Paso offers three semesters of classes and laboratories and two semesters of clinical preceptorships in conjunction with several clinical laboratories in El Paso, Las Cruces, NM, Alamogordo, NM, and Tucson, AZ. El Paso and Las Cruces students return to the university, one day a week, to complete classes in Education, Ethics, Research, and Supervisory and Management courses. Students in Alamogordo and Tucson will take these courses on-line. These are structured courses including practical achievements, the mastery of skills and techniques, and the development of attitudes and behaviors indigenous to a professional clinical laboratory scientist.

I. The Clinical Practicum
Four separate courses are included in the Clinical Practicum:
PRECEPTORSHIP I (students may start Fall part-of-term which begins in summer months)
PRECEPTORSHIP II
PRECEPTORSHIP III (students may start Spring part-of-term which begins early January)
PRECEPTORSHIP IV

Completion of all professional courses in the junior and senior year leads to the award of Bachelor of Science in Clinical Laboratory Science and eligibility for the national certification examination. The certification examination is offered by The Board of Certification, American Society for Clinical Pathologists (ASCP).
II. The Academic Program

The Southern Association of Schools and Colleges accredit the University of Texas at El Paso. The Clinical Laboratory Science Program is accredited by The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, Illinois, 60018; Phone: (773) 714-8880.

A. Address and phone number of the CLS program is:

The University of Texas at El Paso  
College of Health Sciences  
Clinical Laboratory Science Program  
1851 Wiggins Rd.  
El Paso, Texas 79968  
(915) 747-8396

B. Administrative officers and program faculty:

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Email: lalmeida@utep.edu

William Lewis, MA MT (HASCP)  
Distance Learning Instructor  
(925) 747-7243 wlewis@utep.edu

Dolores Licerio, MS  
Administrative Assistant  
Room 418 915 – 747-8396

C. CLASSROOM ACCOMMODATIONS

If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

D. If a student is not successful in earning at minimum of 75% in any of the CLS courses, the student will be dismissed from the program. The student may reapply to the program but will be REQUIRED to AUDIT all courses that the student has been successful in and earn at least a 75% in the audited classes. During the auditing of courses, the student is required to attend the classes and take all exams and pass the exams with a minimum of 75%. If the returning student is not successful at obtaining the minimum standards, the student may not return to the program.
E. Leave of Absence Policy: Students who are in good academic standing and must temporarily withdraw from the major due to unavoidable circumstances such as medical problems or military duty should request a leave of absence from the program. Documentation of the reason for the leave request will be required and will be considered by the Academic Advancement Committee. If the reasons for the leave request are deemed appropriate, the student will receive a letter indicating that the Leave of Absence has been granted. These students are not dismissed from the program and will be placed in the first available space once they are able to return. NOTE: If the Leave of Absence is extremely lengthy, a condition of readmission may be that some or all of prior coursework is repeated (audited) to insure academic success.

F. See list of course descriptions at the end of the document.

III. Admission to Professional Phase of Program (Upper Division)
Admissions criteria and capacity policy
A. The number of students admitted to the program is limited to 20 - 30 by the size of the campus student laboratories and the number of clinical affiliated laboratories. Students may be REQUIRED to attend Preceptorship out of the El Paso area at their own expense. If students do not volunteer to take an out of town Preceptorship then students will be chosen via a lottery method. Based on availability, students may not be immediately guaranteed a clinical assignment during the regular semester and thus may have to begin clinical rotations in a Part of Term for the fall and spring semesters. All students will be registered for the part of term courses and may have to pay out of pocket for tuition for these part of term Preceptorship Classes (Preceptorship I and III).

Students hoping to enter the professional phase of the program must complete all academic requirements prior to starting the upper division classes in the Fall semester.

Students completing approximately 72 semester hours of prerequisite courses must apply for the professional phase of the program in the spring semester. Applicants must have an overall GPA of 2.75 and a 2.5 GPA in math and sciences. University and clinical faculty will interview all applicants. A limited number of clinical sites are available; therefore, students will be selected to enter the professional phase of the program based upon stated availability and begin the professional phase once a year in the fall session.

All lower-division course work must be completed prior to enrolling in the professional Clinical Laboratory Science courses. All students beginning the professional courses will be required prior to the clinical practicum to show evidence of professional liability insurance, current CPR certification, a recent physical examination, and current immunizations, including a Hepatitis B and Influenza vaccination. A grade of “C” or higher must be earned in each CLS class. Issuing of the BS degree IS NOT contingent upon the student’s passing of any type of external certification or licensure examination.

B. CLS students compete for the professional phase of the program as only a maximum of 30 students will be accepted.

C. Students are selected using the following criteria:
   a. GPA of 2.5 or better in the Sciences/Math
   b. Overall GPA of 2.75 or better
   c. Application to the CLS upper division
d. Interview with UTEP, CLS Faculty and/or Hospital Clinical Instructors

e. Students selected will begin the summer semester of each new academic year

D. **Background checks and Drug Screens**: Students must undergo and pass a background check and drug screen prior to being admitted into the Clinical Laboratory Science Program. Information concerning the background checks and drug screens may be found at the UTEP College of Health Sciences web site under student resources.

**IV. General Policies and Information for New CLS Students**

A. **Vaccinations** *(Please see Compliance Check List at the end of the handbook)*
   a. All students must have at least 2 of the 3 Hepatitis B vaccines prior to Fall semester of the upper division.
   b. All other vaccinations will be up-to-date, including test for TB
   c. Vaccination records will be taken to the UTEP Student Health Center

B. **Attendance**
   a. Students are expected to be on time for all classes and to keep absences to an absolute minimum. You may be dropped from the class due to excessive absences. See course syllabi for details.
   b. UTEP faculty and the clinical instructor should be informed of any necessary absence in advance.
   c. In the case of an emergency or illness that will necessitate an absence, the instructor should be telephoned prior to class time.

C. **Competency Based Laboratories**
   **STUDENTS ARE REQUIRED TO WEAR THE UTEP CLS SCRUBS IN ALL STUDENT LABORATORIES AND DURING PRECEPTORSHIP AND HEALTH FAIRS.**
   a. Clinical laboratories are competency based.
   b. Laboratory techniques will be practiced in the lab until specific skills are acquired and mastered.
   c. Students will demonstrate their competency to perform these specific skills to a CLS faculty member before advancing to the next laboratory test procedure.
   d. Depending on laboratory instructor, students may be given laboratory Terminal Performance Objectives (TPO's).
      1. TPO’s are questions pertaining to the laboratory testing policies, procedures and protocols.
      2. Students will be required to answer these questions in their own words.
      3. Class textbooks, reference material, and library services may be used to help the student answer the TPO questions.
      4. TPO’s will be turned in to CLS clinical instructor prior to demonstrating competency.
      5. Plagiarism is illegal and will not be tolerated in this program. Student may be subject to disciplinary action as indicated in the UTEP Student Manual

D. **Academic Dishonesty**
   1. Academic dishonesty by a student will not be tolerated.
   2. Any student suspected of academic dishonesty may also be subject to disciplinary action as stated above.
D. Community Service: **CLS students MUST engage in community service.**

**First year CLS students** must participate at the Community Health Fair held on a Saturday (Fall or Spring semester depending on community calendars) in San Elizario, Socorro, or Fabens and acquire an additional 8 hours of community service related to the CLS profession or support the UTEP/CLS program mission. **Noncompliance will result in a 5% deduction in your Chemistry I laboratory grades.**

**Second year CLS students** must acquire a minimum of 30 hours of service per year **OUTSIDE OF CLINICAL ROTATION TIME.** All service activities need to relate to the CLS profession or support the UTEP/CLS program mission. Participation at the Community Health Fair in San Elizario, Fabens, or Socorro is mandatory. Noncompliance will result in the student receiving an Incomplete (I) for Preceptorship IV until the hours have been completed. Any service performed with the Hospitals of Providence or any UTEP activity during rotation hours do not count toward the community service requirement but are considered as preceptorship hours.

**MENTORSHIP OPPORTUNITY:**
Second year CLS students may engage in mentoring a CLS Junior student(s). If a Second year student decides to mentor CLS junior students this must be a year-long commitment and must arrange the details with the UTEP Clinical Coordinator for community service credit. Be advised that this time may most likely occur during the weekend. For every 2 hours you are mentoring with a Junior, you will receive one (1) hour of community service credit.

E. Evaluation criteria

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<th>Grade</th>
<th>Percent</th>
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<td>A</td>
<td>90-100%</td>
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<tr>
<td>B</td>
<td>80-89%</td>
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<tr>
<td>C</td>
<td>75-79%</td>
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<tr>
<td>D</td>
<td>74.9 - 70%</td>
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<tr>
<td>F</td>
<td>69% or below</td>
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a. A grade of “C” or higher must be earned in each CLS class.

b. If a student earns less than a “C” in any CLS class, the student will not proceed to the professional phase (preceptorships) until the class has been successfully passed with a C or better.

c. Each CLS course instructor has the right to increase the grade percent as the instructor sees fit.

V. PRECEPTORSHIPS:
Clinical placement may not be immediately guaranteed and students may have to begin clinical rotations in a part of term for fall and or spring semesters. Students who begin part of term semesters may have to pay out of pocket for tuition for these Preceptorship Classes (Preceptorship I and III). Students receive their clinical rotation schedule preceptorship syllabus during the preceptorship orientation held during the month of May. Note that this is approximately three months before the clinical rotations begin.

A. Before beginning the Preceptorship, students must show the College of Health Sciences Compliance Coordinator proof of:
1. Current physical exam.
3. Current CPR certification
4. Liability and Health insurance coverage (included in registration)
5. Current “City Wide Orientation” (CWO)
6. Background check and Drug Screen and finger printing (New Mexico requirement)
7. Any additional documentation required to be specified by the Compliance Office

B. Orientation
1. The student must take the online citywide orientation before entering Preceptorship.
   This is mandatory. STUDENTS WILL NOT BE ALLOWED TO ENTER PRECEPTORSHIPS IF THEY HAVE NOT COMPLETED THE CITY-WIDE ORIENTATION.
2. In addition, each individual clinical affiliate may require mandatory orientation for their facility to familiarize the student or newcomer to their own policies, procedures and protocols. The Clinical Coordinator will advise students of these requirements.
3. Refer to the Preceptorship syllabus for details

C. Supervision
1. Supervision of the student should be available at all times by a clinical preceptor.
2. It is expected that considerable supervision will be necessary at the start of a rotation and that minimal supervision will be required at the end of the rotation, however, the degree of supervision is left to the discretion of the clinical preceptor in charge.
3. All laboratory testing results which were completed by the student must be reviewed and counter signed by the technologist in charge prior to being reported out. Under NO circumstances should a student sign and release lab results without the acknowledgement and signature of his/her immediate supervisor.

D. Policy and Safety Regulations
1. You are required to observe all safety requirements, regulations, policies and protocols of your clinical training affiliate, as if you were an employee of that facility.
2. All OSHA (Occupational Safety and Health Act of ’88) procedures and protocols will be adhered to.
3. Any conduct unbecoming to a UTEP CLS student, or failure to adhere to any of these policies and procedures, could result in being withdrawn from clinical practicum.

E. Transportation: Students are required to provide their own transportation to and from clinical sites.

F. Research Rotation: Research rotations are available for students interested in conducting research. Contact the CLS Faculty for more information.
G. Tuition and Fees
   1. UTEP tuition is charged for all courses and clinical practicum per semester. **Tuition and fees are subject to change by regent or legislative action** and become effective on the date enacted.

   2. Students may expect the following approximate expenses each semester plus fees which are not included in the figures below:

   - **Tuition & fee estimate** $356.26 / Credit hour (resident)
   - **CLS Major Fee** $300.00 / semester
   - **Liability Insurance (estimated)** $Provided senior year
   - **Health Insurance** $see attachment
   - **Books (purchased in 1st year)** $600.00 +
   - **Books during 2nd year** $250.00

H. Professional Dress Code for Student laboratories and Clinical Preceptorship
   1. All students will be attired in a CLS uniform. Jeans are not allowed. Clinical facilities will require wearing specific disposable lab coats.
   2. The CLS clinical uniform is to be worn during clinical rotations. Nametags (UTEP ID) are to be worn at all times.
   3. Closed toed shoes will be worn at all times. Wear comfortable flat to low-heeled shoes is recommended. Tennis shoes are acceptable but must be kept clean at all times. **Tennis shoes must be made of non-porous materials and meet OSHA requirements. CANVAS OR WEBBED MATERIALs ARE NOT ACCEPTABLE.**
   4. Do not wear jeans, as this does not reflect a professional appearance.
   5. Beards and moustaches are to be kept clean, neat and trimmed.
   6. Long hair is to be tied back to keep it away from the facial area.
   7. Students that have hair that is not considered a professional color will be asked to dye their hair to a more appropriate color.
   8. For safety purposes, do not wear dangling earrings, lose bracelets, and sharp or oversized rings. The wearing of nominal jewelry that is small is acceptable. Facial body-piercing is not allowed. Wearing body-piercing jewelry is not recommended in a hospital laboratory setting.
   9. All visible tattoos MUST be covered.

I. Counseling
   1. Depending on the issue, counseling is available from the CLS faculty, the University Counseling Center, or Office of Student Life.

   2. If concerns develop at the clinical site, call the UTEP CLS Clinical Coordinator before problems get out of hand.

J. Clinical Rotations
   Students must submit materials for compliance by the deadline set by the Compliance office. Students are not to enter the clinical laboratory facilities until ALL compliance and clearances have been completed by the CLS Program, the UTEP Compliance office and the clinical facilities education department and or Human Resources office. **Students may not enter a clinical laboratory facility at any time if they are not currently assigned to that location, with no exceptions. No student is allowed to leave their preceptor rotation at any time without authorization of program officials to visit a different clinical site, department or fellow student. Failure to follow instructions may result in disciplinary action or dismissal from the program.**
Once students have been cleared at all levels as stated above, the student will be notified by the UTEP CLS Clinical Coordinator that they may now contact an individual in the clinical lab department they have been assigned to as stated in their rotation schedule. Students should only wear the UTEP ID / Student badge during rotation hours. Students must remove the badge at the completion of the day’s rotation.

K. Clinical Rotation Schedule
1. A complete syllabus for preceptorships is posted on Blackboard before classes begin. The syllabus will include practicum calendar, rotation schedule, and schedule of exams for Preceptorships I, II, III, and IV. Students receive their rotation schedule during orientation approximately 3 months in advance.

2. Students, in no way, replace paid staff members in these clinical laboratory rotations.

3. Students will be allowed lunch breaks and coffee breaks and will be assigned these by clinical supervisors at the individual sites. Most common practice is for the student to receive a 30 minute lunch break and one 15 minute morning break.

L. Integrity
1. Absolute honesty and integrity are a critical aspect of your chosen profession. Confidentiality of patient information is another. These must be strictly observed.

2. Any student who falsifies patient records and/or results, cheats on quality control results, interferes with laboratory functions, deliberately cheats on any CLS program exam or exhibits any of the behaviors listed in the Probation/Dismissal policy will be considered to be in violation of both the UTEP and CLS program policies, and may be subject to immediate dismissal from the clinical practicum and the CLS program itself.

3. If such a dismissal is warranted from the CLS Program, a detailed signed statement will be permanently placed in the student's files.

M. Student Employment and Hospital Service Work performed by Students
Students on clinical rotations are not expected to provide “service work” for the clinical sites during their clinical rotation placements. Students may not be substituted for clinical staff. After demonstrating competency, students may be permitted to perform procedures under qualified supervision; however, it is the responsibility of the supervising employee for final verification of the data and release to the laboratory information system.

Any service work by students in the clinical setting outside of the academic hours is non-compulsory. If a student chooses to be hired by a clinical site for a job that does not require a certified medical laboratory scientist (MLS), the work hours must be scheduled at a time other than class hours. In such cases, the student is considered an employee of the clinical site and the work is NOT considered to satisfy any part of the student’s clinical rotation experience.

1. No hospital service is required of any student in the UTEP Clinical Laboratory Science Program. Students may not be substituted for clinical staff.
2. Qualified students may be offered employment; **HOWEVER**, students are cautioned to remain cognizant of their responsibility to the CLS program and their academic responsibilities.

3. Qualified student(s) can be employed by clinical facilities provided such openings are available and employment does not interfere with the students educational goals.

N. Affiliate Site Visits
   1. UTEP CLS faculty will visit the clinical affiliate to determine the student's progress.
   2. Each student will have an opportunity to discuss progress and / or any concerns that may arise at the student’s clinical site.
   3. The student is encouraged to seek counsel with the CLS Clinical Coordinator/Program Director concerning any other clinical facility situation that may arise.

O. Evaluation of Clinical Affiliates
   1. Each student will complete an evaluation of the department they were assigned to, at the end of each clinical rotation.
   2. The evaluation will be held in strict confidence by the program faculty and will be shared with the clinical affiliate only after completion of the entire clinical practicum.
   3. Comments will in no way affect the student's grade or recommendation for future employment.

VI. **Additional Student Responsibility**
   A. Pregnancy
      1. CLS students assume the responsibility of somewhat hazardous working conditions during said time.
      2. Student must have a physician's statement of physical ability to continue activity in classes, labs, and clinical activity rotations.

   B. Changes of name, address, or telephone numbers must be reported to the UTEP CLS Program Director and Affiliate Education Coordinator as soon as possible.

   C. Professional Membership
      1. Each student is urged to become a student member of the American Society for Clinical Laboratory Science (ASCLS).
      2. Those students that choose to belong to ASCLS receive favorable rates for CLS publications, group insurance, and sponsored seminars.

VII. **Insurance Responsibility**
   A. Health Insurance and accident insurance is mandatory and is included in the tuition. **Students are not covered by workmen's compensation. If injuries occur during the clinical practicum the student is responsible for any costs incurred.**

   B. Students enrolled in the clinical practicum will be provided liability insurance through the University of Texas System.

VIII. **Clinical Practicum Curriculum**
   A. Goals and Objectives
      1. During the course of the 2nd year of the CLS clinical practicum, students will enroll in the
four Preceptorship courses.
2. During this clinical practicum, students will be required to be at their specific facility Monday through Thursday as per the schedule indicated in the syllabus. **Students are required to be on site 32 hours per week** (lunch and/or coffee breaks are not counted).
3. Students are required to be in class at UTEP, College of Health Sciences for additional classes. These classes may take place in the evenings and/or on Fridays. Students must refer to the current schedule for specific days and time.

B. Practicum Performance
1. On-line Examinations
   a. On-line examinations will be formal examinations based on the study material from the BOC and other appropriate study books.
   b. These examinations will be given online and are timed.
   c. Dates of exams are given in the preceptorship syllabus.
   d. **Examinations: How will I be graded? see below**

2. Performance Evaluations
   a. Each clinical facility will have a certified technologist who will be your “mentor” during your specific department rotations.
   b. At the end of students rotation, his/her mentor will evaluate the student’s overall quality of performance, professional conduct, and clinical competence.
   c. Students will be evaluated on their overall ability to function in a laboratory as a productive hematologist, bio-chemist, microbiologist, immunohematologist, etc.
   d. A list of specific tasks and competencies must be completed at each site before the clinical facility instructor (mentor) will sign, acknowledging completion.
   e. **Performance evaluations: see below**

C. Practicum Grading System **PRECEPTORSHIP ASSESSMENT (How will I be graded?)**

**FALL**
1. STRONGLY RECOMMENDED - Summer Preceptorship Preparation (Elsevier’s) 10%
   **DUE DATE: Aug 15, current year**
   Scanned 11 exams results 20%
   Scanned completed self-assessments 20%
   Comprehensive Exam (Aug 15, current year Room and Time TBA) 60%
2. Pre-comprehensive exam - September 10%
3. Pre-comprehensive exam - November 10%
4. Exam after each rotation 25%
5. Rotation evaluation scores 10%
6. Weekly comprehensive exams (3:00 p.m. R) 15%
   Mandatory Attendance
7. Case Studies 10%
   Individual case study presentation (20-25 minutes) from preceptor experience (50%)
   Attendance/Case study critique (50%)
8. Fall Comprehensive Semester Final - December 20%
   **Must be passed with a minimum of 55% (55% or greater receives 20 points)**

**FALL COMPREHENSIVE EXAM:**
If a student is not successful in earning a minimum of 55% on the fall comprehensive exam, the
The student will be issued the grade of “I” in the Preceptorship I and II courses and will be required to remediate and re-take the comprehensive exam before the start of the Spring semester. The student will only be allowed to take the comprehensive exam for a maximum of three (3) times. If the student is not successful after taking the fall comprehensive exam three (3) times, then the student will be dismissed from the program and receive a grade of D. Please note that if a student is withdrawn from the preceptorships the student will not be able to graduate with a BS in CLS but can earn a degree in Multidisciplinary Studies. The student may choose to continue with other CLS lecture classes. The date of the exam re-takes will be arranged with the UTEP Clinical Coordinator and Program Director.

**SPRING**

1. Pre-comprehensive exam - January 10%
2. Pre-comprehensive exam – April 10%
3. Exam after each rotation 20%
4. Rotation evaluation scores 10%
5. Weekly comprehensive exams 15%
6. Case Studies 10%
   - Individual case study presentation (20-25 minutes) from preceptor experience (50%)
   - Attendance/Case study critique (50%)
7. Comprehensive semester final – May *Minimum grade 75 (See below)* 25%
8. STRONGLY RECOMMENDED-Proof of registration for ASCP exam 5%

**ROTATION EXAMINATIONS (end of rotation exam):**

The exams will be timed and on-line in your Blackboard course. Exams will be taken on Thursday from 3:00 – 5:00 p.m. in a designated location TBA on the UTEP main campus. Students are required to bring their laptop or tablet computer and must be equipped with a camera. If the student does not have a laptop then the student may go to the UTEP library to check a computer out. If students are attending out of town rotations, exam date and times will be determined with the UTEP Clinical Coordinator. Please note that cameras will be used to proctor the exams. Make sure that your equipment is functional or the exam will be invalidated.

The exams consist of randomly computer-generated multiple-choice questions and pictures from a test bank of over 5000 questions. The test questions will appear one-at-a-time and must be answered. If the question is skipped or unanswered, the student will not be able to revisit the question. The exams are timed and the student will have only the allotted time to finish the exams, therefore the student must be prepared ahead of time. The student must check their rotation schedule for specific exam dates. Examinations cannot be rescheduled unless there is an emergency (such as the death of an immediate family member or hospitalization). Documentation must be provided and will be placed in the student’s permanent file. Vacations, weddings, child care issues and doctor’s appointments DO NOT constitute an emergency. Any conflicts with this policy can be addressed with the program director in advance (not the same day of the event). No study materials, telephones, or other electronic devices other than the computer to take the exam may be taken into the exam room. Students will not be allowed to leave the testing room once the exam has been started. Please bring your water and use the restroom before starting the exam.

A grade of "C" (75%) is the minimum grade acceptable for the Preceptorship. All rotation exams must be passed with a minimum of 75%. If an unsatisfactory grade is achieved on the first attempt, the student will have only one opportunity to retake the exam to achieve a minimum of 75%. The final grade for that exam will be replaced with the passing
grade (greater than or equal to 75%).

The student is given this opportunity ONLY ONCE per semester during the preceptorship year. You cannot “carry over” your opportunity from the previous semester.

If the student fails a second rotation exam, the student will be withdrawn from the preceptorship classes. Please note that if a student is withdrawn from the preceptorships the student will not be able to graduate with a BS in CLS but can earn a degree in Multidisciplinary Studies. The student may choose to continue with other CLS lecture classes.

FINAL COMPREHENSIVE EXAM:
If a student is not successful in earning a minimum of 75% on the comprehensive final exam, the student will be issued the grade of “I” in the Preceptorship III and IV courses and will be required to remediate and re-take the comprehensive exam. Please note that the student will not be able to view the final comprehensive exam/score. If the student has not achieved the minimum 75%, the student will be contacted AFTER graduation ceremonies. If the student has not achieved the minimum of 75%, the student will only be allowed to take the comprehensive exam for a maximum of three (3) times. If the student is not successful after taking the spring comprehensive exam three (3) times, then the student will be dismissed from the program and receive a grade of D. Please note that if a student is withdrawn from the preceptorships the student will not be able to graduate with a BS in CLS but can earn a degree in Multidisciplinary Studies. The date of the exam re-takes will be arranged with the UTEP Clinical Coordinator and Program Director.

ABSENCE FROM ROTATIONS:
Students are expected to be on time or early to all rotations. In the case of an emergency or illness necessitating an absence, the student MUST inform the Clinical Faculty, i.e. the clinical individual you are working with, no later than 7:00 A.M. of an expected absence. The student must also inform the UTEP CLS Clinical Coordinator of any absences. The emergency cell phone number of the UTEP Clinical Coordinator should be used and if no answer, the student MUST leave a message. All absences WILL be made up by the student on the student's own time at the convenience of the affiliate. Students may not ask for time off from rotations to study. Please note that this may entail the student using his or her spring break or holidays. Students must fill out the attendance log on a daily basis and have it counter signed by a clinical faculty member.

EXAM GRADE SCALE (%)

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 - 90</td>
<td>A</td>
</tr>
<tr>
<td>89 - 80</td>
<td>B</td>
</tr>
<tr>
<td>79 - 75</td>
<td>C</td>
</tr>
<tr>
<td>74.9 – 70</td>
<td>D</td>
</tr>
<tr>
<td>69 and below</td>
<td>F</td>
</tr>
</tbody>
</table>

IX. Probation /Dismissal Policy: Students may be dismissed from the CLS Program for the following reasons
A. Unsatisfactory academic performance.
   1. A cumulative grade of 75 % must be maintained for all CLS courses.
   2. A cumulative grade of 75% must be maintained in all clinical practicum rotations.
   3. The student will receive a final grade of C if the unsatisfactory grade is replaced with a 75%.
B. Unsatisfactory Clinical Laboratory Performance.
   1. Unprofessional conduct, excess tardiness, or absences either at the clinical facilities or CLS classes.
   2. Inability to perform designated clinical tasks, or consistent failure to obtain satisfactory results.
   3. Cheating or falsifying patient results.
   4. Falsifying QC /results.
   5. Unsatisfactory or unethical conduct as defined in the UTEP Student Manual.

C. Recommendations for dismissal from clinical affiliates.
   1. Recommendations to dismiss the student from clinical practicum will be brought to the CLS Program Director and the CLS Program Faculty.
   2. A decision to remove the student from the clinical practicum may be appealed through the UTEP Student Due Process procedure. (see below)

D. Illegal Drugs and Narcotics
   In compliance with the Drug Free Schools and Communities Act of 1990, The Board of Regents of The University of Texas System provides the following: any student who is guilty of the illegal use, possession and/or sale of a drug or narcotic, including any amount of marijuana, on the campus is subject to discipline. If a student is found guilty of the illegal use, possession, and/or sale of a drug or narcotic on campus, the minimum penalty shall be suspension for a specified period of time and/or suspension of rights and privileges for a specified period of time.

X. Student Due Process
   A. Students who believe they have been unfairly evaluated must:

      Step 1: Attempt to resolve the difficulty with the faculty member.

      Step 2: If the dispute cannot be resolved in Step 1, the student may within 5 school days appeal to the program director stating the evidence for the continued dispute in writing.

      Step 3: If still unresolved a written complainant, evidence, and reason for the dissatisfaction must be submitted to the Assistant Dean of the College of Health Sciences. The Assistant Dean will call upon the Due Process Committee to review and make recommendations to the Assistant Dean based on statements, written evidence, and interviews with all parties involved.

      Step 4: If the matter is still not settled, the complainant will notify the Dean, within five (5) school days. The Dean will then pursue the matter with the Vice President for Student Affairs.

      The process will continue until the matter is resolved.

X. CLS Course Descriptions

   Course descriptions for all CLS courses can be located in the university catalog and at the end of this handbook.
**XI. Clinical affiliates, addresses and telephone numbers:**

New affiliates are being acquired to accommodate the University’s requirement for class of 20 or more. The student must be aware that they may be required to leave El Paso to complete their required clinical preceptorship at the student’s own expense.

<table>
<thead>
<tr>
<th>Clinic Name</th>
<th>Address</th>
<th>Zip Code</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memorial Medical Center</td>
<td>2450 S. Telshor Blvd.</td>
<td>Las Cruces, NM</td>
<td>(505) 521-2200</td>
</tr>
<tr>
<td>Mountain View Regional Medical Center</td>
<td>4311 E. Lohman</td>
<td>Las Cruces, NM</td>
<td>(575) 556-6701</td>
</tr>
<tr>
<td>The Hospitals of Providence Memorial Campus</td>
<td>2001 N. Oregon</td>
<td>El Paso, TX</td>
<td>(915) 577-7300</td>
</tr>
<tr>
<td>Northwest Medical Center</td>
<td>6200 N. La Cholla Blvd</td>
<td>Tucson, AZ</td>
<td>(520) 469-8655</td>
</tr>
<tr>
<td>University Medical Center</td>
<td>4815 Alameda Avenue</td>
<td>El Paso, TX</td>
<td>(915) 521-7789</td>
</tr>
<tr>
<td>The Hospitals of Providence East Campus</td>
<td>3280 Joe Battle Blvd</td>
<td>El Paso, TX</td>
<td>(915) 832-2991</td>
</tr>
<tr>
<td>Las Palmas Medical Center</td>
<td>801 N. Oregon</td>
<td>El Paso, TX</td>
<td>(915) 521-1170</td>
</tr>
<tr>
<td>Del Sol Medical Center</td>
<td>10301 Gateway Blvd</td>
<td>El Paso, Texas</td>
<td>(915) 595-9254</td>
</tr>
<tr>
<td>El Paso Cancer Treatment Center (East)</td>
<td>7848 Gateway East</td>
<td>El Paso, TX</td>
<td>(915) 599 – 1313</td>
</tr>
<tr>
<td>El Paso Cancer Treatment Center (West)</td>
<td>1901 Grandview Ave</td>
<td>El Paso, TX</td>
<td>(915) 544-6750</td>
</tr>
<tr>
<td>El Paso Children’s Hospital</td>
<td>4845 Alameda</td>
<td>El Paso, TX</td>
<td>(915) 242-8382</td>
</tr>
<tr>
<td>The Hospitals of Providence Sierra Campus</td>
<td>1625 Medical Center Dr.</td>
<td>El Paso, TX</td>
<td>(915) 242-8382</td>
</tr>
<tr>
<td>El Paso Cancer Treatment Center (Joe Battle)</td>
<td>3270 Joe Battle Blvd.</td>
<td>El Paso, TX</td>
<td>(915) 849-2700</td>
</tr>
<tr>
<td>Gerald Champion Regional Medical Cntr</td>
<td>2669 N. Scenic Dr.</td>
<td>Alamogordo, NM</td>
<td>(575) 439 - 6100</td>
</tr>
</tbody>
</table>
Upon graduation and initial employment, the UTEP CLS graduate will be able to demonstrate entry-level competencies in the below areas of professional practice.

Clinical Laboratory Scientists are competent in:

- developing and establishing procedures for collecting, processing, and analyzing biological specimens and other substances;
- performing analytical tests of body fluids, blood cells, and other substances;
- integrating and relating data generated by the various laboratory departments while making decisions regarding possible discrepancies;
- confirming abnormal results, executing and verifying quality control procedures, and developing solutions to problems concerning the generation of laboratory data;
- evaluating quality control results and quality assurance measures, and instituting proper procedures to maintain accuracy and precision;
- establishing and performing preventive and corrective maintenance of equipment and instruments as well as identifying appropriate sources for repairs;
- developing, evaluating, and selecting new techniques, instruments and methods in terms of their usefulness and practicality within the context of a given laboratory’s personnel, equipment, space and budgetary resources;
- demonstrating professional conduct and interpersonal skills with patients, laboratory personnel, other health care professionals and the public;
- establishing and maintaining continuing education as a function of growth and maintenance of professional competence;
- providing leadership in educating other health personnel and the community;
- exercising principles of management, safety, and supervision;
- applying principles of educational methodology, and
- applying principles of current information systems.
THE UNIVERSITY OF TEXAS AT EL PASO
COLLEGE OF HEALTH SCIENCES
CLINICAL LABORATORY SCIENCE PROGRAM

ADMISSION REQUIREMENTS

ESSENTIAL FUNCTIONS
(Adopted October 1999)

Essential Functions for this program include:

1. **Mobility:** a) The student must have adequate gross mobility in order to maneuver in a timely fashion, throughout the department.

   b) The student must be able to lift his or her arms above shoulder height in order to place or remove items of ten pound or less from shelves.

   c) The student must be able to bend over at the waist or squat down (waist and knees) in order to place and remove items of ten pounds or less from drawers and cabinets.

2. **Manual Dexterity:** The student must have adequate fine motor skills in order to be able to manipulate small objects in a safe and accurate manner. Examples would include (but are not limited to) being able to operate a computer keyboard; dial a telephone; handle cuvettes, sample cups, pipette tips, and reagent vials; pick up glass slides from table top, and use a pen or pencil to write the English language legibly.

3. **Auditory Acuity:** The student must be able to hear well enough to respond to significant sounds in a clinical lab. Examples would include (but are not limited to) being able to hear the telephone ring, hear the fire alarm or other warning system; be able to hear signals generated from instrumentation that may indicate normal operating status or malfunction, and be able to follow verbal instruction from a coworker or supervisor.

4. **Verbal Communication Skills:** The student must be able to speak in a manner that is understandable (this being both clear distinct words and adequate volume) to persons on the other end of a telephone or other health care workers listening specifically to the student in person.

5. **Visual Acuity to read, write, discern colors, and use a microscope:** The student must have adequate eyesight such that he/she can recognize and distinguish gradients of color (such as on a urine dipstick), read English words and numbers either on a video display screen, computer printout, or legible handwriting, and interpret lines and points on a graph.

<table>
<thead>
<tr>
<th>Health Insurance Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upon acceptance into the Upper division of the CLS Program the student is required to demonstrate evidence of health insurance coverage.</td>
</tr>
</tbody>
</table>

I acknowledge that I understand the essential function and I agree to comply with the CLS Program Requirements.

_________________________  _______________________
Print Name                  Signature                  Date
Title IX Notification Regarding Discrimination

Title IX of the Education Amendments of 1972 (Title IX), prohibit discrimination on the basis of sex in education programs or activities operated by recipients of Federal financial assistance. Sexual harassment of students, which includes acts of sexual violence, is a form of sex discrimination prohibited by Title IX. Sexual violence, refers to physical sexual acts perpetrated against a person's will or where a person is incapable of giving consent due to the victim's use of drugs or alcohol. An individual also may be unable to give consent due to an intellectual or other disability. A number of different acts fall into the category of sexual violence, including rape, sexual assault, sexual battery, and sexual coercion. All such acts of violence are forms of sexual harassment covered under Title IX.

Pursuant to our obligations to comply with Title IX of the Education Amendments of 1972, UTEP does not discriminate on the basis of sex in the operation of its educational programs and activities. This commitment to non-discrimination applies to both employment in and admission to such programs and activities.

Inquiries regarding Title IX should be referred to the University’s designated Title IX Coordinator(s):

Sandy Vasquez, Title IX Coordinator
Assistant Vice President for Equal Opportunity and Compliance Services
Ethics Officer
Kelly Hall, Room 302
915-747-5662
svasquez@utep.edu

Ryan Holmes, Deputy Title IX Coordinator
Associate Dean of Students and Director of Student Conduct and Conflict Resolution
Office of Judicial Affairs
Union West 102
915-747-8694
rholmes@utep.edu

Catie McCorry-Andalis, Deputy Title IX Coordinator
Associate Vice President and Dean of Students
Office of Student Life
Union West 102
915-747-5648
cmandalis@utep.edu

The full text of the University's current policies on Equal Opportunity/Non-Discrimination, Sexual Misconduct and Harassment and Accommodation for Individuals with Disabilities is available at the Equal Opportunity webpage.
Fire Alarm Evacuation Procedure.

Never ignore a fire alarm signal, even if you have reason to believe that it may be false.

A. Prepare Yourself

The University’s fire alarm systems are tested and maintained to afford building occupants the best possible warning in case of fire. Before an alarm sounds, take note of the following:

1. Always identify at least two evacuation routes and exits in case of an emergency. Exit Signs in the corridors clearly indicate the way. The route you normally take may not be accessible in an emergency so be prepared with an alternate.
2. Identify the locations of the fire alarm pull stations so that you may sound an alarm in case of fire or other emergency.
3. Observe how to operate the pull station. They are quite simple.
4. When the alarms are tested observe the sound. Learn to recognize it as an indication of an emergency requiring evacuation.
5. Do not prop open the stairwell doors. They must fully close in order to keep smoke and heat out and to maintain a safe passageway out of the building for building occupants. Report stairwell doors that do not self-close and latch so that they may be repaired. Your department will not be charged for repairs to promote safety.
6. Your supervisor should identify an area outside the building a safe distance away where your department will gather in an emergency. Everyone must be accounted for at that location. If you haven’t been told where your departmental gathering point is – ask.
7. If there are sensitive items within your space, keep them locked away when not in use. You may not have time to store them in an emergency.

B. When an alarm sounds

In the event that the fire alarm sounds in your building its time to get out. You don’t have to see or smell smoke to know this. The following steps should be taken as you prepare to leave your area:

1. Close any open windows. Close the door to your office or room when leaving. This will help slow a fire by reducing the oxygen that feeds a fire. Also, closing your door will reduce the probability of smoke ruining the contents of your room. Don’t lock the door. Firefighters must gain entry to all rooms when fire occurs to verify that everyone has escaped.
2. If on an upper floor use the stairs to get out. **DO NOT USE THE ELEVATORS!** An elevator shaft can act like a chimney flue, filling with hot smoke, gases and flames in a fire’s natural progression. The elevator control panel or the building electrical system may become disabled due to the emergency. This could trap you in the elevator and place you at risk of fire, heat, or smoke inhalation.
3. Exit the building and proceed to your departmental gathering point away from the building. Do not block driveways or parking lots. Emergency equipment may need access.
4. Report to your supervisor at the departmental gathering point. Do not wander off until you have been accounted for. Emergency crews may lose precious minutes if they must search the building for you so don’t forget to report to your supervisor.

5. Do not re-enter the building until it has been declared safe by Campus Police or the city fire department. No other individual should make that call. And if you hear an alarm remember, just because you can’t see or smell smoke doesn’t mean that there isn’t an emergency. There may still be a fire or some other emergency requiring exit from the building. Often fire alarm pull stations may be activated to evacuate the building for other emergencies, such as a chemical emergency, gas leak, medical emergency, or even to draw attention to a crime in progress.

Do not ignore a fire alarm signal, even if you have reason to believe it may be false.

A. If fire starts in your area
   Remember to close the door to the fire area, activate the fire alarm, call 911 from a safe telephone, evacuate the building, do not use elevators and if caught in smoke, get down low. The clearest air is closer to the floor. If you become trapped, go to a window and wave something white to catch the attention of those below. If a telephone is available, call 911 and be prepared to give a detailed description of your area. Remember, the rescuers are not as familiar with campus buildings as you are.

B. Persons with disabilities
   We all have an obligation to look out for each other. Each department should develop procedures for evacuating those students, staff or faculty who have disabilities. Persons with hearing impairment should be alerted when an alarm sounds and those with visual impairments will need our help in exiting a building. Notify emergency personnel when a person with disabilities remained behind in a stairwell area of refuge. If you have a disability that could impair your options in an emergency you should make every effort to plan your exit ahead of time. Make a point to become familiar with the building. Stairwells should be checked out, taking note of landings and whether they may be used as an area of refuge. Locations of exits, telephones, signs and fire alarm pull stations should be noted. Remind your co-workers and others you frequently visit that you may need their assistance in case of an emergency.

When an emergency does occur, request help. Don’t wait for someone to offer it.
Affective performance emphasizes the ability to constructively interact with co-workers and supervisors and the ability to make decisions utilizing available data. Affective evaluations include but are not limited to the areas of communication, initiative, self-reliance, judgment, dependability, adherence to policy, and organizational ability. Technical knowledge and proficiency are important qualifications for any job but equally important are affective attributes when considering how well an individual will function in the clinical lab environment. Therefore, a policy for dismissal from the program based on affective problems has been established.

If a student receives <70% on an affective evaluation, a conference will be held between the clinical instructor, the clinical coordinator and the student to discuss the problem. The student will also meet with the Program Director to discuss the situation. When a student receives <70% on three affective evaluations, this may be cause for dismissal and the problem will be discussed between the clinical instructors, University program officials (Program Director & Clinical Coordinator) and the student. A final hearing will be conducted in the presence of the CLS Advisory Committee and a decision reached by judicial process.

The student may appeal the decision by following the standard University of Texas El Paso appeals procedure.
Advice to Students and Employees in Clinical and Teaching Microbiology Laboratories

- Be aware that bacteria used in microbiology laboratories can make you or others who live in your household sick, especially young children, even if they have never visited the laboratory.
  - If you work in a laboratory, it is possible for you to bring bacteria home through contaminated lab coats, pens, notebooks, and other items that you use in the microbiology laboratory.
  - Avoid taking laboratory supplies outside of the laboratory to limit contamination.

- Persons working with any infectious agents, including *Salmonella* bacteria, must be aware of potential hazards, and must be trained and proficient in biosafety practices and techniques required for handling such agents safely, in particular, to:
  - Wash hands frequently while working in and immediately before leaving the microbiology laboratory and follow proper hand washing practices. This is especially important to do before preparing food or baby bottles, before eating and before contact with young children.
  - Leave food, drinks or personal items like car keys, cell phones and mp3 players outside of the laboratory. These items may become contaminated if you bring them into the laboratory or touch them while working in the laboratory.

- Wear a lab coat or other protective garment over personal clothing when working in a microbiology laboratory. Remove protective garment before leaving for non-laboratory areas (e.g., cafeteria, library, or administrative offices). Dispose of protective garment appropriately or deposit it for laundering. Lab coats should be removed from the laboratory only when they are to be laundered by the institution.

- If you work with *Salmonella* bacteria in a microbiology laboratory, be aware that these bacteria can make you sick. Watch for symptoms of *Salmonella* infection, such as diarrhea, fever, and abdominal cramps. Call your health care provider if you or a family member has any of these symptoms.
Student Health Services Information
The CLS Student must submit to the student health center a copy of the following information. Explain to them that you are a CLS student so that they put your in the correct file.

1. Record of immunizations. If the student is not current on immunizations, the student must be brought up to date on the immunizations. This may be done at the student health center or via private physician. Titers must be performed for chicken pox (Varicella and Hepatitis B if you have previously been vaccinated).

2. Record of Hepatitis B vaccine, 3 doses.

3. Record of TB skin test or chest X-ray.

4. Physical exam, one per year, CBC and UA (may be performed via private physician)

Note:
- The student must bring the UTEP picture ID
- The Student Health Center takes VISA and MasterCard
- They have a Nurse Practitioner every day, if you think you need to see the Doctor you must see the Nurse Practitioner first then she will make an appointment for you to see the doctor.
- Tetanus booster approximately $21.00
- TB test approximately $5.00
- MMR approximately $47.50
- Hepatitis B approximately $35.00 X 3 = $105.00 (you need 3, Initial followed by one month, followed by 5 month)
- Varicella approximately is $24.00
- Rubella approximately $28.00
- Rubeola titer approximately $20.00
- Lab Package: All titers, CBC, & UA approximately $90.00

Information is subject to change. Please see the Student Health Center for Current information.
INCIDENT REPORT

Student Name: ___________________________ UTEP ID# ____________________
Home Address ___________________________________ Phone:______________
Time Accident Occurred:________ a.m./________ p.m. Date:__________________
Place of Accident:________________________________ Number of People Involved: _____

PART OF BODY INJURED

Abdomen _______ Foot _______ Ankle _______ Hand _______ Arm _______ Head _______
Chest _______ Knee _______ Ear _______ Leg _______ Elbow _______ Mouth _______
Eye _______ Nose _______ Face _______ Tooth _______ Finger _______ Wrist _______
Other (specify) _____________________________________________

DESCRIPTION OF THE ACCIDENT

How did the accident happen?
What was student doing?

PART OF BODY INJURED

Arm _______ Head _______ Chest _______ Knee _______ Ear _______ Leg _______
Elbow _______ Mouth _______ Eye _______ Nose _______ Face _______ Tooth _______
Finger _______ Wrist _______ Other (specify) ___________________________________

NATURE OF INJURY

Abrasions _______ Lacerations _______ Bites _______ Needle Sticks _______
Bruises _______ Poisonings _______ Concussions _______ Punctures _______
Cuts _______ Scratches _______ Dislocations _______ Shock (el.) _______
Fractures _______ Sprains _______ Other (specify) ___________________________

DEGREE OF INJURY

Non-disability _______ Temporary Disability _______ Permanent Impairment _______
Death _______

Student’s signature ________________________________

IMMEDIATE ACTION TAKEN

First-Aid Treatment _______ By: ________________________________
Campus Police Notified (747-5611) _______ By: ________________________________
EMS notified (911) _______ By: ________________________________
Sent to STUDENT HEALTH CTR. _______ By: ________________________________
Sent Home _______ By: ________________________________
Sent to Physician _______ By: ________________________________

NAME ________________________________

Faculty/Preceptor in charge when accident occurred [Enter NAME(S)]__________________________
Present at scene of accident: YES_________ NO_________
PHYSICIAN’S NAME: __________________________________ PHONE: __________________________

Sent to Hospital ______ By: _____________________________________________________________

HOSPITAL NAME: __________________________________ PHONE: __________________________

Was a Parent or other individual notified? YES___ NO___ When___________ How___________

Name of Individual(s) Notified:__________________________________________________________

By whom? (Enter NAME) ____________________________________________________________

WITNESSES:
1.- NAME:________________________ ADDRESS/PHONE:______________________________

2.- NAME:________________________ ADDRESS/PHONE:______________________________

REMARKS
What recommendations do you have for preventing accidents of this type? _________________
________________________________________________________________________________________

______________________________  ________________  ______________________
Signature: Student  Signature: Faculty  Signature: Program Director
The University of Texas at El Paso  
College of Health Sciences  
Clinical Laboratory Science Program  

Suggested Course Sequence  
**PRE-PROFESSIONAL COURSES**  

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td><strong>Spring Semester</strong></td>
</tr>
<tr>
<td>UNIV 1301</td>
<td>HIST 1301 History of US</td>
</tr>
<tr>
<td>RWS 1301 or ENGL/ COMM 1611</td>
<td>RWS 1302 or ENGL 1313 or ESOL 1312</td>
</tr>
<tr>
<td>or ESOL 1311</td>
<td>BIOL 1305 General Biology</td>
</tr>
<tr>
<td>CHEM 1305 General Chemistry</td>
<td>BIOL 1107 Topics in the study of Life II</td>
</tr>
<tr>
<td>CHEM 1105 Lab for Gen Chemistry</td>
<td>CHEM 1306 General Chemistry II</td>
</tr>
<tr>
<td>MATH 1411 Calculus</td>
<td>CHEM 1106 Lab for Gen Chemistry</td>
</tr>
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<thead>
<tr>
<th><strong>Summer I</strong></th>
<th><strong>Summer II</strong></th>
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<tbody>
<tr>
<td>COMM 1301 or 1302 or ENGL/COMM1611</td>
<td>Humanities Core PHIL ethics 2306 (Required)</td>
</tr>
<tr>
<td>HIST 1302 History of US Since 1865</td>
<td>Visual &amp; Performing Arts Core (Select one)</td>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td><strong>Spring Semester</strong></td>
</tr>
<tr>
<td>POLS 2310 Intro to Politics</td>
<td>POLS 2311 American Gov &amp; Politics</td>
</tr>
<tr>
<td>BIOL 2313 Human Anatomy/Phys II</td>
<td>Social &amp; Behav Science PSYC 1301(suggested)</td>
</tr>
<tr>
<td>BIOL 2113 Human A &amp; P II Lab</td>
<td>MICR 2440 General Micro</td>
</tr>
<tr>
<td>CHEM 2324 Organic Chemistry</td>
<td>CLSC 2310 Molecular Diagnostics</td>
</tr>
<tr>
<td>CHEM 2124 Organic Chemistry Lab</td>
<td>CLSC 2111 Molecular Diagnostics Lab</td>
</tr>
<tr>
<td>CLSC 2210 Intro to CLS</td>
<td>CLSC 2212 Clinical Laboratory Statistics</td>
</tr>
<tr>
<td>BIOL 3320 Genetics</td>
<td><strong>Total 16</strong></td>
</tr>
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<thead>
<tr>
<th><strong>PROFESSIONAL COURSES</strong></th>
<th><strong>Junior</strong></th>
<th><strong>Senior</strong></th>
</tr>
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<tbody>
<tr>
<td><strong>Summer I</strong></td>
<td><strong>Summer II</strong></td>
<td><strong>Spring Semester</strong></td>
</tr>
<tr>
<td>CLSC 3357 Opportunistic &amp; Parasitic Infections</td>
<td>CLSC 3351 Concepts in Immunodiagnostics</td>
<td>CLSC 4275 Clinical Manag &amp; Supervision</td>
</tr>
<tr>
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<td><strong>Total 3</strong></td>
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<tr>
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</thead>
<tbody>
<tr>
<td>CLSC 3354 Clinical Chemistry I</td>
<td>CLSC 3262 Clinical Chemistry II</td>
</tr>
<tr>
<td>CLSC 3155 Clinical Chemistry I Lab</td>
<td>CLSC 3164 Clinical Chemistry II Lab</td>
</tr>
<tr>
<td>CLSC 3356 Hematology I</td>
<td>CLSC 3364 Hematology II</td>
</tr>
<tr>
<td>CLSC 3257 Hematology I Lab</td>
<td>CLSC 3366 Infectious Diseases</td>
</tr>
<tr>
<td>CLSC 3252 Body Fluids</td>
<td>CLSC 3268 Infectious Diseases Lab</td>
</tr>
<tr>
<td>CLSC 3153 Body Fluids Lab</td>
<td>CLSC 3368 Immunohematology</td>
</tr>
<tr>
<td>CLSC 3260 Serology</td>
<td>CLSC 3269 Immunohematology Lab</td>
</tr>
<tr>
<td>CLSC 3161 Serology Lab</td>
<td><strong>Total 15</strong></td>
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</tr>
</thead>
<tbody>
<tr>
<td>CLSC 4471 Preceptorship I</td>
<td>CLSC 4275 Clinical Manag &amp; Supervision</td>
</tr>
<tr>
<td>CLSC 4472 Preceptorship II</td>
<td>CLSC 4476 Preceptorship III</td>
</tr>
<tr>
<td>CLSC 4273 Clinical Education</td>
<td>CLSC 4478 Preceptorship IV</td>
</tr>
<tr>
<td>CLSC 4274 Clinical Investigation</td>
<td>CLSC 4180 CLSC Seminar</td>
</tr>
<tr>
<td><strong>Total 12</strong></td>
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</tr>
</tbody>
</table>

Total of 133 hours
I acknowledge that I have received the UTEP, College of Health Sciences, Clinical Laboratory Science Student Handbook, and that the contents were explained to me.

I further acknowledge that it is my responsibility to read and understand its contents.

If I have any questions regarding this CLS Handbook, I will not hesitate to ask the CLS Program Director or its Faculty, so I may be clear about policies and procedures for the Clinical Laboratory Science Program and my responsibilities as a student.

__________________________________________
(Print Name)

__________________________________________
(Signature)

________________________
(Date)
College of Health Sciences – Clinical Laboratory Science

Compliance Requirements Checklist

- Criminal Background Check
- Drug Screen
  - Criminal Background Check and Drug Screen must be done through this link, https://scholar.verifiedcredentials.com/utep; must be done/cleared prior to start of classes.
- CPR Card (Basic Life Support-Healthcare Provider by the American Heart Association)
  - can be scanned/mailed to below email address
- Community Wide Orientation
- Liability Insurance - provided by the University of Texas System; student should be enrolled/registered to be covered.

The below medical requirements must be submitted to the UTEP Student Health Center, Mon.-Thu. 8:00am-4:00pm, Fri.-8:00am-11:30am, 1:00pm-4:00 pm. (Please be patient as wait time at the Student Health Center may vary).

- Physical Examination (Yearly Requirement)
- PPD Skin Test (TB-Tuberculin Testing) (Yearly Requirement)
- Tdap (Required every 10 years)
- Varicella TITER ONLY (Chickenpox, Immunity IgG)
  * If Varicella titer is not positive, will require 2 doses of Booster.
- MMR (Measles(Rubeola), Mumps and Rubella) TITERS ONLY (Immunity IgG)
  * If MMR titer is not positive, will require 2 doses of Booster.
- Hepatitis B - Documentation of 3 doses and HBsAb (Hepatitis B Surface Antibody) TITER
  * If Hepatitis B titer is not positive, will require 2nd series of 3 vaccines and a 2nd HBsAb titer.
- Influenza Vaccine (Required every Fall semester until March 31st of the following year)
  * Date when it was received, Manufacturer, Trade Name, Lot#, Expiration Date, and Injection must be included in the documentation
  (Waivers WILL NOT be permitted unless documentation from a Physician provided to Student Health Center indicates allergic reaction to vaccine.)

NOTE: Additional vaccines may be required depending on specific circumstances or at the request of the clinical agencies.

STUDENTS ARE RESPONSIBLE TO SUBMIT ALL THE REQUIREMENTS PRIOR TO THE DEADLINE AS PROCESSING CAN TAKE PLACE IN A FEW DAYS OR MONTHS DEPENDING ON THE TYPE OF DOCUMENT AND INDIVIDUAL CIRCUMSTANCES.

Floriza Lantican
UTEP-CHS Clinical Compliance Coordinator
Phone: 915-747-7225 / frlantican@utep.edu

UTEP Student Health Center
Phone: (915)747-5624
CLS Course Descriptions

CLSC 2111 - Molecular Diagnostics Lab
This laboratory provides the basic skills necessary for performing and applying molecular techniques used in molecular pathology as described in CLSC 2310. The course will focus on the specific applications of molecular techniques within a variety of disciplines such as infectious disease, hematology, immunology, hemostasis, forensic science, and transplantation immunology. Prerequisites: BIOL 1305, BIOL 1107, BIOL 3320, and CHEM 1306, each with a grade of C or higher. Corequisite: CLSC 2310.

CLSC 2210 - Intro to the Clinical Lab
Introduction to the clinical laboratory (2-0) Information on the careers available in the clinical laboratory as well as an overview of each department in clinical pathology will be presented. Tours of hospital, reference labs, and specialized clinical laboratories will be arranged. This course includes the principles and practices of quality control and pre-analytical, analytical, and post analytical components of urine and body fluid analysis. Prerequisites: (BIOL 1305 and BIOL 1107) and (CHEM 1306 and CHEM 1106).

CLSC 2212 - Clinical Lab Computations
This course encompasses clinical diagnostic computations required in the clinical laboratory setting including clinical chemistry urinalysis, hematology, immunohematology, microbiology, and molecular techniques. The course also includes fundamental concepts and techniques which underlie applications to the various clinical laboratory disciplines, including statistical concepts, calculations, quality control, instrument and method assessment/verification, and laboratory emphasis on sampling and applications to include pre-analytical and post analytical phases of testing. Prerequisite: MATH 1411, CHEM 1306 and CHEM 1106 each with a grade of C or higher.

CLSC 2310 - Molecular Diagnostics
This course will encompass diagnostic applications in the clinical laboratory. Areas covered will include genetics, molecular techniques, molecular pathology, principles and practices of quality control and quality assurance including pre- and post-analytical assurance and the application of safety to laboratory practice. Prerequisites: CHEM 1306, BIOL 1305, BIOL 3320, and MATH 1411, each with a grade of C or higher.

CLSC 3150 - Medical Terminology
Medical Terminology (1-0) The course is designed for students to gain a working knowledge of medical terminology, symbols, abbreviations, roots, prefixes, and suffixes. The course may be taken by any interested students in associated majors or programs or health related fields.

CLSC 3153 - Body Fluids Lab
Body Fluids Lab (0-3) This laboratory provides the basic laboratory skills necessary for performing urine body fluids analyses. Several fundamental laboratory methods are performed by the students using common body fluids principles. These laboratory assays provide the basis for most body fluids assays which will be demonstrated in the clinical hospital laboratory rotations. This course includes the principles and practices of quality control and pre-analytical, and post analytical components of microscopy and urinalysis and the application of safety to laboratory practice. Corequisite: CLSC 3252.
CLSC 3155 - Clinical Chemistry I Lab
Clinical Chemistry I Lab (0-3); this laboratory provides the basic skills necessary for performing clinical chemistry laboratory analyses. Several fundamental laboratory methods are performed by the students using common clinical chemistry principles. These laboratory assays provide the basis for most clinical chemistry analyses which will be demonstrated in the clinical hospital laboratory rotations. Corequisite: CLSC 3354. Prerequisites: CHEM 1305, CHEM 1105, CHEM 1306, CHEM 1106 and CHEM 2324 each with a grade of "C" or better and department approval. Restricted to major: CLIN.

CLSC 3161 - Serology Lab
Serology Lab (0-3) Serological techniques commonly used in the clinical laboratory will be encompassed with emphasis on direct application to the clinical laboratory. Serological testing and interpretation for disease such as: syphilis, mononucleosis, streptococcal infections and others. Corequisite: CLSC 3260 Prerequisite: CLSC 3351 with a grade of "C" or better.

CLSC 3164 - Clinical Chemistry II Lab
Clinical Chemistry II Lab (0-3) A continuation of CLSC 3155 with an emphasis in therapeutic and abused-drug monitoring, pharmacokinetics, toxicology, hormones, and methods. Corequisite: CLSC 3262. Prerequisites: CLSC 3155, CLSC 3354 each with a grade of "C" or better and department approval. Restricted to major; CLIN.

CLSC 3252 – Body Fluids
Body Fluids (2-0) This course will cover the chemical, serological, and hematological procedures performed on body fluids. Corequisite: CLSC 3153. Prerequisite: Department approval. Restricted to major: CLIN.

CLSC 3257 - Hematology I Lab
Hematology I Lab (0-6) This course is designed to develop the skills and techniques necessary to recognize and identify normal and abnormal components of the hematopoietic system, Restricted to major: CLIN. Corequisite: CLSC 3356. Prerequisite: Admission to the Upper-division.

CLSC 3260 - Serology
Serology (2-0) This course emphasizes the detection of disease by the use of serological techniques. Restricted to major: CLIN. Prerequisite: CLSC 3351 with a grade of "C" or better.

CLSC 3262 - Clinical Chemistry II
Clinical Chemistry II (2-0) A continuation of CLSC 3354 with an emphasis of therapeutic drugs of abuse, toxicology, pharmacokinetics, hormones, and methods. Corequisite: CLSC 3163. Prerequisites: CLIN 3155 and CLIN 3354 each with a grade of "C" or better and department approval.

CLSC 3268 - Infectious Diseases Lab
Entries Infectious Diseases Lab (0-6) This laboratory courses develops the basic skills and techniques necessary for the isolation, identification, and anti-microbial susceptibility for a variety of pathogens causing diseases. This course includes the principles and practices of quality control and pre-analytical, analytical/ and post analytical components of clinical microbiology and the application of safety to laboratory practice. Corequisite: CLSC 3366. Prerequisites: MICR 2440 with a grade of "C" or better and department approval. Restricted to major: CLIN.

CLSC 3269 - Immunohematology Lab
Immunohematology Lab (0-6) This laboratory course is designed to develop and refine skills in performing antigen and antibody identification techniques, compatibility testing and blood component preparation. Laboratory procedures for processing and selecting blood products, identification of blood group antigens and antibodies, blood storage procedures, quality control and pre-analytical, analytical/and post analytical components of immunohematology and the application of safety to laboratory practice. Restricted to major: CLIN. Corequisite: CLSC 3368.

CLSC 3351 - Concepts in Immunodiagnostics
Concepts in Immunodiagnostics (3-0) This course covers basic clinical immunology and applications in laboratory medicine. Interactions among immune cells and their secretions are examined. The role of the immune system in tumor growth, transplantation and rejection, and autoimmune diseases is covered. Various methods utilized in the clinical laboratory are demonstrated and discussed. This course includes the principles and practices of quality control and pre-analytical, analytical, and post analytical components of clinical immunology. Restricted to major: CLIN. Prerequisite: MICR 2440 with a grade of "C" or better.

CLSC 3354 - Clinical Chemistry I
Clinical Chemistry I (3-O) This course includes the principles and practices of quality control and pre-analytical, analytical, and post analytical components of clinical chemistry. Basic concepts of laboratory mathematics, colorimetry, spectrophotometry, fluorometry, electrophoreses, chromatography are discussed. Chemical laboratory fundamentals and procedures are presented and related to normal and abnormal human physiology and biochemistry. Restricted to major: CLIN. Corequisite: CLSC 3155. Prerequisites: CHEM 1305, CHEM 1105, CHEM 1306, CHEM 1106, and CHEM 2324 each with a grade of "C" or better and department approval.

CLSC 3356 - Hematology I
Hematology I (3-O) This course is a comprehensive study of the process of blood formation. It includes morphological and biochemical relationships of red blood cell formation in healthy vs. disease states, as well as the performance and application of current methods in hematologic analysis and technology. This course includes the principles and practices of quality control in pre-analytical, analytical, and post analytical components of hematology. Restricted to majors: CLIN. Corequisite: CLSC 3257. Prerequisite: BIOL 2313 with a grade of "C" or better.

CLSC 3357 - Opportunist & Parasitic Infect
This course covers the pathogenesis and the epidemiology of opportunistic microorganisms. The isolation, concentration, and identification of mycological and parasitological specimens is reviewed and discussed. This course includes the principles and practices of quality control, the pre-analytical and post-analytical components of clinical microbiology, and the application of safety to laboratory practice. Prerequisite: MICR 2440 (MICR 2340 and MICR 2141) with a grade of "C" or better AND departmental approval. Restricted to major: CLIN.

CLSC 3358 - Clinical Microbiology I
Clinical Microbiology I (2-2) This course will cover the concentration, isolation and identification of infectious mycological and parasitological specimens. Restricted to major: CLIN Prerequisite: MICR 2440 with a grade of "C" or better and admission to the Upper-division.

CLSC 3364 - Hematology II
This course emphasizes white-cell formation and function. The etiology and treatment of white blood cell disorders are discussed. It also encompasses hemostasis and laboratory determination of hemostatic disorders, including the study of the interaction of blood vessels and platelets with both the coagulation
and fibrinolytic systems. Prerequisites: CLSC 3356 and CLSC 3257 with a grade of C or better. Department approval also required. Restricted to major: CLIN

**CLSC 3366 - Infectious Diseases**
Infectious Diseases (3-0) This course covers the pathogenesis and the epidemiology of pathogenic microorganisms. The diagnosis of infectious diseases by various cultivation isolation and identification techniques is discussed. This course includes the principles and practices of quality control and pre-analytical, analytical, and post analytical components of clinical microbiology and the application of safety to laboratory practice. Restricted to major: CLIN. Corequisite: CLSC 3267. Prerequisites: MICR 2440 with a grade of "C" or better and department approval.

**CLSC 3368 - Immunohematology**
Immunohematology (3-0) This immuno-chemical reactivity of blood antigens and antibodies, blood grouping, compatibility testing, and hemolytic disease of the newborn are presented. Restricted to major: CLIN. Corequisite: CLSC 3269. Prerequisites: CLSC 3351 and CLSC 3356 each with a grade of "C" or better.

**CLSC 4100 - Ethics**
Ethics (1-0) A study of legal and ethical principles in health care and laboratory medicine

**CLSC 4180 - Seminar**
Seminar (1-0) The student will be given the opportunity to develop a broader understanding of the clinical laboratory scientist's role as a health professional in a variety of learning experiences, including seminars, lectures, and panel discussions. Principles and application of professionalism will be addressed as well as ongoing professional career development. Included in this course are review and practice examination. Restricted to major: CLIN. Prerequisite: Department approval.

**CLSC 4190 - Special Problems**
Special problems (0-0-1) Independent study in clinical laboratory research. Limit six credits. Prerequisite: Department approval.

**CLSC'4 4273 - Clinical Education**
Clinical Education (2-0) This course will cover basic education techniques and terminology to train/educate users and providers of laboratory services, including the development of continuing education programs, curriculum design, program and student assessments, and test development. Restricted to major: CLIN Prerequisite; Department approval.

**CLSC 4274 - Clinical Investigation**
Clinical Investigation (2-0) This course will cover research in medical/clinical settings with a focus on research planning, design, data collection and dissemination, and evaluation of published studies. Students will design and perform research to include proposal writing. Correlation of disease states and changes in laboratory values will also be included as case studies. Restricted to major; CLIN. Prerequisite: Department approval.

**CLSC 4275 – Clinical Lab Mgmt/Supervision**
Clinical Laboratory Management and Supervision (2-0) Introductory course in the principles and techniques used in the supervision and management of the clinical laboratory in the health professions. The course includes human resource management, management and motivational theories, communication skills, interviewing, performance appraisals, accreditation agencies, federal and state regulations, budget and strategic planning, evaluation instruments, and the
implementation of a laboratory quality improvement program. Financial management is covered including profit and loss, cost/benefit reimbursement requirements, and materials/inventory management. Restricted to major: CLNN, Prerequisite: Department approval.

CLSC 4290 - Special Problems
Special Problems (0-0-2) Independent study in clinical laboratory research. Limit six credits. Prerequisite: Department approval.

CLSC 4373 - Clinical Lab/Mgmt./Supervision
Clinical Laboratory Management and Supervision (3-0) This course will cover scheduling, workload recording cost accounting, and instrument and method evaluation. Restricted to major: CLIN.

CLSC 4377 - Clinical Education/Research
Clinical Education and Research (3-0) Course will cover basic teaching techniques, development of continuing education programs, and proposal writing. Restricted to major: CUN. Prerequisite: Department approval.

CLSC 4390 - Special Problems Catalog
Entries Special Problems (0-0-3) Independent study in clinical laboratory research. Limit six credits. Prerequisite: Department approval.

CLSC 4471 - Preceptorship I
Instruction and practice of techniques and their applications in the clinical laboratory setting (practicum) in hematology, immunohematology, clinical chemistry, clinical microbiology, coagulation, body fluid analysis, and serology. This course includes the principles and practices of quality control and pre-analytical, analytical, and post-analytical components of laboratory science and the application of safety to laboratory practice. Corequisite CLSC 4472-

CLSC 4472 - Preceptorship II
Instruction and practice of techniques and their applications in the clinical laboratory setting (practicum) in hematology, immunohematology, clinical chemistry, clinical microbiology, coagulation, body-fluid analysis, and serology. This course includes the principles and practices of quality control and pre-analytical, analytical, and post-analytical components of laboratory science and the application of safety to laboratory practice. Corequisite: CLSC 4471. Prerequisite: CLSC 3368 with a grade of C or better.

CLSC 4476 - Preceptorship III
A continuation of CLSC 4471 and 4472. The student will also be given the opportunity to demonstrate (1) the ability to apply knowledge, attitudes, and skills to the clinical laboratory practices and procedures; (2) the ability to integrate previous knowledge and skills with more sophisticated instrumentation and advanced methodology; (3) an attitude of cooperation and concern in interpersonal relationships and interdisciplinary communication and team building with patients and healthcare workers; and (4) an appreciation of the ethical foundations of clinical laboratory sciences. This course includes the principles and practices of quality control and pre-analytical, analytical, and post-analytical components of laboratory science and the application of safety to laboratory practice. Corequisite: CLSC 4478. Prerequisites: CLSC 4471 and CLSC 4472, each with a grade of C or higher.

CLSC 4478 - Preceptorship IV
A continuation of CLSC 4471 and 4472. The student will also be given the opportunity to demonstrate (1) the ability to apply knowledge, attitudes, and skills to the clinical laboratory practices and procedures; (2) the ability to integrate previous knowledge and skills with more sophisticated
instrumentation and advanced methodology; (3) an attitude of cooperation and concern in interpersonal relationships and interdisciplinary communication and team building with patients and healthcare workers; and (4) an appreciation of the ethical foundations of clinical laboratory sciences. This course includes the principles and practices of quality control and pre-analytical, analytical, and post-analytical components of laboratory science and the application of safety to laboratory practice. Corequisite: CLSC 4476. Prerequisites: CLSC 4471 and CLSC 4472, each with a grade of C or higher.

College of Health Science Compliance Requirements Instructions Information

Criminal Background Check and Drug Screening
- must be done through our vendor, Verified Credentials.

Here’s the link http://scholar.verifiedcredentials.com/utep.

Or you can visit our website http://chs.utep.edu/complianceclearances/ and

click on icon

Enter your 10 character requirement code (see related code below)

<table>
<thead>
<tr>
<th>Requirement/Phase:</th>
<th>Code:</th>
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<tbody>
<tr>
<td>Background Check &amp; Drug Screen - CHS - All Programs</td>
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<td>Background Check - CHS - All Programs</td>
<td>FFGHB-34429</td>
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<tr>
<td>Drug Screen Only - CHS - All Programs</td>
<td>PRXFG-79342</td>
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</table>

- Create an account
- Review required information
- Enter required information
- Within 24 hours, you will receive confirmation email from the vendor

* For Best Results – Use laptop or desktop computer to complete this process.

If you have any questions on your background screening process or results, please contact Verified Credentials Client Services at 800.473.4934 or http://scholar.verifiedcredentials.com/utep

CPR card
- Basic Life Support - Healthcare Provider by the American Heart Association.
- CPR card issued by military is accepted.

Community Wide Orientation
- can be done on Blackboard.
* The Compliance Office requires your consent before you can be added to the Compliance Office Blackboard Shell. Visit our website [http://chs.utep.edu/complianceclearances/](http://chs.utep.edu/complianceclearances/) Click on [Blackboard](http://chs.utep.edu/complianceclearances/) icon and fill out the form. You need to provide us your UTEP EMAIL ADDRESS ONLY!

* Go to Blackboard, log in using UTEP username and password. Click on CHS-SON Compliance Course. Go through the CWO modules and take the CWO exam. You will need to get at least 90% to be given credit for this requirement.

**MEDICAL CLEARANCE REQUIREMENTS FOR CLINICALS**

Please bring the following documentation to the Student Health Center (SHC) THIS WILL SAVE YOU TIME: 1. **Student ID 800 #;** 2. **Immunization Card;** 3. **Proof of Physical Exam, Lab work (If by other provider):** You will be seen by the RN to review your records and verify compliance completion; The SHC will send records to the Compliance Office.

**PHYSICAL EXAM:** Submit Proof of Complete Physical Exam within last 12 months and required titers. IF NOT PREVIOUSLY DONE THEN MAKE AN APPOINTMENT at the Student Health Center 747-5624 for your physical exam, lab work and needed immunizations.

IF PREGNANT your physical needs to be completed by your OB doctor and you need a note regarding any limitations/restrictions regarding activity and diseases to avoid.

**Tuberculosis Test (PPD):** You will be required to do a TB test at least yearly. If you have had a positive TB test in the past, you will need to submit documentation of the positive test and chest x-ray results, and must complete the TB questionnaire yearly. (Some clinical sites are requesting a chest x-ray every 5 years). TB testing not done on Thursdays at the Student Health Center.

**IMPORTANT!!** Have Measles(Rubeola), Mumps, Rubella and Varicella IgG titers done to determine immunity first, if MMR boosters and/or Varivax vaccine are needed the TB Test can be administered simultaneously and will not interfere with TB results. If the vaccines were administered recently, your TB test will need to be delayed 4 weeks from the date of your vaccine. This may delay meeting compliance requirements and clinicals.

**VACCINES:**

**TETANUS, DIPHTHERIA AND ACELLULAR PERTUSSIS:** Must have current Tdap vaccine (NOT the T/D) within last 10 years.

**HEPATITIS B:** Need documentation of a series of 3 vaccines and HBsAb (Hepatitis B Surface Antibody). If titer is equivocal/negative, you will need a 2\textsuperscript{nd} series of 3 vaccines again, followed by a 2\textsuperscript{nd} titer.

**MMR:** Measles(Rubeola) IgG titer, Mumps IgG titer, and Rubella IgG titer. If results are equivocal/negative you will need 2 boosters.

**VARIVAX (Chicken pox):** Varicella IgG titer, if result is equivocal/negative you will need 2 doses of Varivax vaccine.
**FLU VACCINE YEARLY:** Flu vaccine is required every Fall semester until March 31st of the following year. If given at another facility need name of manufacture, Lot#, type given (intranasal live, attenuated or inactivated vaccine).

**IF PREGNANT** the SHC will not administer any vaccines or TB test without a note from your OB doctor.

**NO APPOINTMENT NEEDED FOR LAB DRAWS, VACCINE ADMINISTRATION OR REVIEW OF COMPLIANCE DOCUMENTATION. DEPENDING ON PATIENT LOAD THERE MAY BE A WAIT TIME, PLEASE PLAN FOR THIS.**

**STUDENT HEALTH CENTER DOES NOT DO TITERS AFTER 3:00 PM.**

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**CPR Training Locations**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Address</th>
<th>Telephone</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProAction Emergency Services Institute</td>
<td>6585 Montana Ave., S600</td>
<td>(915) 532-2771</td>
<td><a href="http://www.proactionems.com">www.proactionems.com</a></td>
</tr>
<tr>
<td>Life Ambulance EMS Academy</td>
<td>5720 Trowbridge Dr.</td>
<td>(915) 772-1642</td>
<td><a href="http://www.life-ambulance.org">www.life-ambulance.org</a></td>
</tr>
<tr>
<td>El Paso-CPR</td>
<td>2267 Trawood Dr. B-5</td>
<td>(915) 629-0980</td>
<td><a href="http://www.elpaso-cpr.com">www.elpaso-cpr.com</a></td>
</tr>
<tr>
<td>El Paso Community College</td>
<td>100 West Rio Grande Ave.,</td>
<td>(915) 831-3772</td>
<td><a href="http://www.epcc.edu">www.epcc.edu</a></td>
</tr>
<tr>
<td>Region II EMS</td>
<td>125 N. Main St.</td>
<td>(575) 524-2167</td>
<td><a href="http://www.emsregion2.org">www.emsregion2.org</a></td>
</tr>
</tbody>
</table>

*CPR card MUST be for a Healthcare Provider set by the American Heart Association*