UPMC WILLIAMSPORT PROGRAM IN MEDICAL LABORATORY SCIENCE STUDENT HANDBOOK

UPMC
LIFE CHANGING MEDICINE

2024

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WELCOME

MEDICAL LABORATORY SCIENCE PROGRAM

UPMC Williamsport

Williamsport, PA 17701

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The UPMC Williamsport Medical Laboratory Science Program is currently the only formal laboratory education program offered at UPMC Williamsport. Accreditation is voluntary via the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), and must be renewed periodically through a process of self-study and on-site visitation.

GENERAL INFORMATION

Students are accepted into the program without regard to race, creed, age, religion, sex, national origin, marital status or physical impairment. Students are expected to exhibit responsibility and, as allied health professionals, conduct themselves in a professional manner. Areas of responsibility include those to the patient, to the institution, to the physician, to the profession and to oneself.

A. Responsibility to the patient includes sincerity, kindness and compassion, performance of high quality work and adherence to confidentiality concerning patient results.

B. Responsibility to the institution includes cooperation with other departments or any campus, loyalty to the health system and adherence to established policy.

C. Responsibility to the physician includes performance of test procedures quickly and accurately and communication of test results in an efficient manner.

D. Responsibility to the profession includes participation in professional societies and their activities, education of the public concerning the duties of a clinical laboratory scientist and active recruitment for the profession.

E. Responsibility to oneself includes development of high performance standards, honesty and integrity and maintenance of the professional knowledge base.

MISSION STATEMENT

UPMC's mission is to serve our community by providing outstanding patient care and to shape tomorrow's health system through clinical and technological innovation, research, and education.

MEDICAL LABORATORY SCIENCE PROGRAM GOALS

1. To educate/train students to become professionals who provide the clinician with the scientific data necessary to aid him/her in restoring the patient to a normal state of mind and body. To do this a student must acquire skills, knowledge and an appreciation of the role he/she plays on the medical team. He/she must develop a sense of responsibility for work performed and a sense of confidence in results obtained. In this way, a student develops as a total person, respectful of the rights of others and able to work cooperatively with others.
2. To provide high standards of education to prospective technologists in our state and local area to assure the availability of an adequate staff to serve our community.
3. To expose the student to other members of the healthcare team through opportunities to view webinars, observation of personnel in other laboratory sections, through presentations/lectures from vendors or physician(s), and/or in observations with physicians.
4. To instill in the student a respect for maintaining professional competency through exposure to continuing education activities designed for laboratory professionals.
5. To encourage the student to:
    - A. Develop a recognition of the importance of the patient in the health care environment.
    - B Respect the rights and the dignity of the patient.
    - C. Maintain empathy with the patient and the patient's family.
    - D. Treat the patient as an individual who deserves the best care available through the system in place.
6. To present instruction in the basics of management, planning, decision making, and education in order to provide a foundation upon which to build for career advancement.
7. To train individuals as medical laboratory scientists who are able to develop, evaluate, and perform laboratory procedures with a high degree of accuracy, using good judgment and a willingness to consult with other professionals when deemed necessary.

MEDICAL LABORATORY SCIENCE PROGRAM CAREER ENTRY COMPETENCIES

OBJECTIVE:

Upon completion of the clinical year, the graduate, after a short period of orientation, will be able to assume the responsibility of and perform the duties of an entry level medical laboratory scientist according to the job description at his/her place of employment. These duties will include performing test and quality control procedures, troubleshooting, and demonstrating knowledge of theory and principles of methods in all areas of the clinical laboratory. Measurement of this objective will be accomplished by monitoring the student's performance during the clinical year via written and practical examinations, and attainment of this objective will be indicated by achievement of a minimum grade of 75% in all clinical rotations and theory courses.

GENERAL COMPETENCIES:

- Perform venipuncture skillfully and with appropriate technique for each particular test ordered; handle specimens properly from the time of collection to delivery in the laboratory; assess the patient's condition after venipuncture and see to his/her comfort and well-being, following any established rules and seeking the proper help when necessary.
- Implement specimen accession, identification, evaluation and preparation in the laboratory, not only for routine specimens, but also for specimens that require special handling procedures.
- Calibrate and/or standardize instruments properly; handle routine troubleshooting procedures; perform and document preventative maintenance procedures.
- Report results in an appropriate manner; recognize abnormal and critical values and handle by proper laboratory procedure; perform all tests with accuracy and precision within the established turn-around time.
- Maintain a quality program within established policies and implement corrective action when necessary.
- Use the laboratory computer system to verify specimens and results, locate information and release results.
- Prepare necessary reagents in an accurate manner, following established rules when handling, carrying, or storing chemicals; labeling accurately; and storing properly.
- Follow established safety policies for the particular laboratory and understand the reasons for the policies.

- Demonstrate appropriate communication skills with peers, supervisors and personnel in other areas of the hospital.
- Follow established program and hospital rules and regulations.
- Demonstrate an awareness of patient rights and value, both to the institution and as a fellow human being.

CHEMISTRY:

- Prepare specimens for use, recognize improper specimens, and demonstrate correct procedures for processing, preserving and disposing of all specimens used in chemistry testing.
- Organize and prioritize work; keep work area neat, clean, and organized.
- Demonstrate acceptable skills in the use of manual methods.
- Operate automated and semi-automated equipment with proficiency and accuracy, including start-up, calibration and preventive maintenance procedures; recognize and troubleshoot problems.

For each procedure:

1. Discuss the principles of the procedure
2. Define and use appropriate terminology
3. List normal, abnormal, therapeutic and critical values (where applicable)
4. Perform procedures utilizing proper controls, standards, equipment and technique to assure reliable results
5. Determine possible sources of error
6. Correlate results with patient's clinical condition

- Recognize the need for cost control in use of reagents and control materials and conserve materials when possible without sacrificing test reliability.
- Demonstrate an ability to utilize and interpret quality control procedures in the laboratory.

URINALYSIS:

- Assess appropriateness of specimen for test procedure; prepare specimen for testing; and perform appropriate physical and biochemical testing, using appropriate reagents, dilutions and controls.
- Perform additional testing on urine as results indicate, according to established procedure.
- Utilize established safety procedures.
- Perform preventive maintenance procedures.
- Report results according to established procedure and within established time limits.

HEMATOLOGY:

- Prepare specimens for use and recognize improper specimens.
- Demonstrate proper procedures for processing, preserving, and disposing of all specimens used in this section.

For each procedure:

1. Discuss the principles.
2. Define and use appropriate terminology.
3. List normal, abnormal, and critical values (where applicable).
4. Perform procedures utilizing proper controls, standards, equipment and technique to assure reliability of results.
5. Determine possible sources of error, and correlate results with clinical findings.

- Demonstrate acceptable skills in the use of manual techniques.
- Operate automated and semi-automated equipment accurately and proficiently, including start-up, calibration, preventative maintenance, and shut down procedures; recognize problems when they arise; and determine logical troubleshooting methods for solving problems when possible.
- Process specimens according to established procedure.
- Prepare, stain and read a normal differential accurately.

- Recognize errors or alterations in expected findings, determine cause and correct the results before releasing.
- Recognize and identify abnormal cells and correlate with patient's clinical condition.
- Review quality control results for acceptability and follow established procedure for results that are not acceptable.

COAGULATION:

- Evaluate specimens for suitability as far as time of collection, specimen container, and specimen handling.
- Perform analysis according to established procedure; evaluate control results; recognize deviations from expected results; identify and correct errors.
- Operate instruments according to established procedure, including maintenance and troubleshooting; correlate results of tests with patient's treatment and/or diagnosis.
- Report results according to established procedure and within established time periods.

IMMUNOHEMATOLOGY/SEROLOGY:

- Demonstrate proper procedures of acceptable collecting, labeling, processing, preserving, sorting and disposing of all specimens.
- For each major blood group, identify genetic inheritance, related terminology, antigen and antibody characteristics, correct methods for identification and importance of the system in transfusion reactions, sensitization or hemolytic disease of the newborn.
- Recognize and attempt to resolve problems with ABO and Rh discrepancies, antibody identification, positive DAT results or irregularity in incompatibility testing.
- List donor selection criteria; determine eligibility of donors based upon that criteria and describe the proper technique for collection of donor blood.
- Maintain compliance of test procedures with standards of accrediting and regulation agencies.
- Interpret test results in correlation with established normal ranges and report results according to established procedures, within reasonable time limits and with 100% accuracy.

For each procedure:

1. Discuss the principles of the procedure.
2. Define and use appropriate terminology.
3. List normal, abnormal and critical values (where applicable).
4. Perform procedures using proper controls, equipment and techniques to assure reliability of results.
5. Determine possible sources of error, and correlate results with clinical findings.

- Choose the proper blood or component for the patient; recognize requirements for preparation, storage and preservation of each blood component.
- Demonstrate knowledge of quality control procedures in transfusion service and serology, including legal requirements and record keeping; perform daily QC checks, evaluate results, and record in appropriate areas.

MICROBIOLOGY:

- Demonstrate proper procedure for handling, culturing and disposing of infectious agents from patient and laboratory sources using aseptic technique.
- Inoculate correct media with proper specimen, according to established department protocol and incubate according to proper conditions for growth of suspected microorganisms.
- Identify all media used in the section, list major components and biochemical reactions that occur, and explain the use of the media in identification of particular microorganisms.
- Properly perform all staining procedures used in the department, including fluorescent stains, and screen stained slides for identification of microorganisms.
- Prepare reagents, perform all immunological procedures, and properly interpret results according to standard operating procedure.
- Perform proper procedures for antibiotic sensitivities and interpret results to determine MICs for patient.
- Properly handle all equipment in the microbiology section.
- Recognize and troubleshoot problems correctly when possible.

- Demonstrate proper procedures for acceptable specimen collection, processing and preparation for macroscopic and microscopic examination, for parasites and fungi.
- Isolate and identify parasites in prepared materials.
- Isolate and identify fungal specimens in prepared materials.
- Use and interpret quality control procedures for a microbiology laboratory, recognize questionable results, and correct the problem causing the questionable results.

MISCELLANEOUS:

- Prepare education/case studies for presentation to fellow students (and potentially laboratory staff).
- Participate in demonstrations for community outreach projects such as discussions with prospective students during the interview process, college &/or high school presentations, tours of our technical lab, career fairs for local schools, etc.

STUDENT CLINICAL EXPERIENCE

The combined practical and classroom experience is designed to allow the student to meet the objectives of the program, to provide the student with insight into the role of the clinical laboratory scientist on the healthcare team, and to equip the student to meet the professional challenges of a career in clinical laboratory science. This is done by maintaining an atmosphere that encourages learning, professional growth, and high academic standards.

Students rotate through all clinical laboratory sections, learning procedures performed in each section and practicing them to attain professional skill levels. Students may rotate through the UPMC Williamsport Divine Providence Campus and UPMC Muncy laboratories as an additional learning experience. Didactic classes are regularly scheduled to discuss the principles of laboratory procedures and the relationship of these procedures to the patient's medical condition. During the clinical rotation, students are given ample opportunity to practice and improve skills. After meeting the departmental objectives, a student may perform selected tests on patient samples and report out results for selected procedures under the supervision of a technologist. This process enhances a sense of responsibility and self-confidence. Any problems encountered by the student should be discussed with the Clinical Instructor and followed through to a solution.

Students may have opportunities to observe special procedures or work performed in other areas of the lab and to participate in laboratory continuing education programs. Case study reviews in each major rotation provide better understanding of the role played by the laboratory in diagnosis and treatment of disease and allow the student to relate laboratory testing directly to patient care. Additional patient contact comes during the phlebotomy experience, which is self-paced.

COURSE DESCRIPTIONS

CLINICAL CHEMISTRY:

Didactic and clinical experiences cover the principles and performance of chemical assays and the application of the principles of human physiology and biochemistry to the analysis of blood, serum and other body fluids. Result interpretation and data correlation with diseases, as well as instruction in the operation, maintenance and troubleshooting of analytical instruments, are integral components of this course.

CLINICAL MICROBIOLOGY:

Didactic and clinical experiences involve a comprehensive study of microorganisms and their relationship to disease. Isolation and identification of pathogens and determination of microbial susceptibility are an integral part of the clinical component. Molecular Biology is also explored here through PCR technology, including ID of MRSA, Neisseria gonorrhea, and Chlamydia.

CLINICAL HEMATOLOGY:

Didactic and clinical experiences cover blood cell formation; normal and abnormal cell identification by morphology, immunologic and genetic markers; disease and cell type correlation; and instrumentation use in the analysis and quantitation of blood cells. Cellular analysis of other body fluids is included. The coagulation component includes the dynamics of hemostasis, including platelets, the coagulation and fibrinolytic systems; the clinical significance of changes in these systems; and performance of the procedures for measuring these changes.

IMMUNOHEMATOLOGY:

Didactic and clinical experiences include the study of blood group antigen and antibody systems, antibody detection and identification methods, and compatibility testing as related to the transfusion of human blood. Also included are aspects of a donor service, component preparation, transfusion reactions, neonatal studies, quality control and quality assurance in the Blood Bank.

IMMUNOLOGY/SEROLOGY:

Didactic and clinical experiences include study of the immune response in health and disease, serological procedures used to evaluate a patient's immune response, clinical significance of changes in this response, and tests used to diagnose and monitor disease.

CLINICAL SEMINAR (LABORATORY OPERATIONS):

Incorporates several courses including urinalysis, phlebotomy techniques, laboratory safety, quality control and quality assurance, molecular diagnostic techniques, education, and management.

ADMISSION STANDARDS

ACADEMIC (NON-TECHNICAL) STANDARDS:

In addition to those courses required for a degree from the appropriate college/university, prerequisite course work required for admission into the program in medical laboratory science includes:

- Chemistry, including organic or biochemistry:
  > 16 sem. hours
- Biology, including microbiology and immunology:
  > 16 sem. hours
- Mathematics:
  > 3 sem. hours

All above science courses must fulfill the requirement for a degree; survey courses are NOT acceptable.

Minimum GPA of 2.75 required in science courses

Minimum grade of "C" in all required prerequisite courses

The applicant must complete all prerequisite courses prior to the beginning of the clinical year.

Major science courses completed seven or more years prior to application must be updated.

In addition to completion of academic prerequisites, students who have obtained a degree in a foreign university must have their transcripts evaluated by one of the following evaluating agencies.

International Education Research Foundation, INC.
10736 Jefferson Blvd, #532
Culver City, CA 90230

WES Global Documentation Center
PO Box 2008 STN Main
Newmarket, ON, L3Y 0G5

ACCREDITATION

Accreditation for the Medical Laboratory Science Program is accomplished through:

NATIONAL ACCREDITING AGENCY FOR CLINICAL LABORATORY SCIENCE
5600 North River Road, Suite 720
Rosemont, Illinois 60018

ESSENTIAL FUNCTIONS (TECHNICAL STANDARDS):

The applicant must possess, with or without reasonable accommodations, sufficient:

- Visual acuity to identify microscopic structures, cells and microorganisms and to operate analytical instruments appropriately and safely without endangering instructors, students, other health-care personnel and patients.
- Fine-motor skills and manual dexterity to obtain and manipulate specimens, reagents, instruments and analytical equipment according to established guidelines with speed, accuracy, precision, and in a manner that does not endanger others.
- Communication skills to effectively convey and/or explain results to other health care personnel, both within and outside the laboratory.
- Interactive skills to maintain cooperative and productive working relationships with patients, fellow students, instructors, and other health care personnel.
- Emotional stability to exercise appropriate judgment in responding to emergency situations that may present in the health care environment.
- Ability to effectively handle stressful situations.
- Ability to safely perform all core tasks required of a medical technologist.

Standards are formulated for compliance with the Americans with Disabilities Act and the Rehabilitation Act of 1973.

CURRICULUM

CLINICAL ROTATION:

Each student is assigned a unique rotation for 49 weeks (including orientation, holidays, breaks, and end of the year review). The following is an example of a typical student rotation:

Phlebotomy	2 weeks	Urinalysis	2 weeks
Chemistry	10 weeks	Microbiology lecture & wet lab	4 weeks
Blood Bank	8 weeks	Microbiology	8 weeks
Hematology	8 weeks	Review	3 weeks

Student clinical education is coordinated by a Clinical Instructor in each section. This individual oversees the student rotation, evaluates performance and develops the final grade. Students should report to the Clinical Instructor upon beginning the clinical rotation and should communicate any problems to same instructor.

The approach to clinical education will be as follows:

1. In each department, students will receive objectives and checklists specific for that particular rotation. The student will be responsible for assuring that the checklist is completed as he/she progresses through the section and for turning it in to the program director upon completion of the rotation.
2. Teaching scientists will demonstrate and explain a procedure while the student observes.
3. Students will perform the procedure under the guidance of the instructor until the minimally acceptable level of proficiency, as determined in each area, is attained. Acceptable performance on written or practical examinations is equivalent to a minimum passing grade of 75%.
4. Reading assignments, independent study, projects and/or problem solving exercises may be included in the clinical curriculum. These should be completed, and where required, turned in to the Clinical Instructor prior to completion of the rotation.
5. Each student must complete a notebook for evaluation by the clinical instructor.
6. Exams will be either written or practical performance, given during and/or at the completion of each rotation.
7. Final laboratory grades and an affective performance evaluation will be maintained in the student's file.

DIDACTIC INSTRUCTION

Lectures will be scheduled at specific times on a pre-established schedule. (Times may be altered as needed, but current lecture time is 7 - 8:30 a.m.; 11:30 a.m. - 1 pm; and/or 1:30-3 p.m.) Students are to report to the classroom at the designated time. ***If lectures are postponed or canceled for any reason, the student is expected to spend that time either in the clinical laboratory section currently assigned or involved in a related learning activity.*** Additional lecture and review may be scheduled for one or more days per week. Exams are scheduled in the classroom on Monday afternoons starting at 1:30 pm. Quizzes are scheduled in the classroom on Friday mornings.

Students are encouraged to attend in-lab or in-hospital continuing education programs as well as webinar presentations as the opportunity presents itself. Specific outside activities may be assigned as they are scheduled during each year.

EDUCATIONAL POLICIES

NOTEBOOKS:

All students are REQUIRED to keep a notebook for each rotation (type is student preference). The contents of this notebook will vary with each clinical section, but at a minimum, it should contain principles of procedures, normal values, clinical significance of the test results, and specific reactions that occur during the testing procedure. Hints for ease of test performance and calculations related to the results should also be included. The student should consult the clinical instructor for specific information related to what should be included in the notebook.

The notebook is a tool for the student and should be used to record information that may not be found in textbooks or procedure manuals.

THE NOTEBOOK SHOULD NOT BE A COPY OF THE SECTION PROCEDURE MANUAL. Copying the procedure manual is a waste of time that can be better used in practicing newly learned skills.

Upon completion of the rotation, the notebook should be presented to the Clinical Instructor for evaluation. Evaluation will be based upon completeness of the notebook according to specific criteria established by each Clinical Instructor for that section of the laboratory. The notebook will be graded according to departmental procedure.

A clinical rotation will not be considered complete with an unsatisfactory notebook. Notebooks are due one week after the final day of each rotation unless otherwise approved by the Clinical Instructor!

GRADED ASSIGNMENTS:

(Ex: take home quizzes/exams, Media Lab learning modules, etc.)

Periodically throughout the clinical year, take home quizzes or exams, Media Lab modules, and sometimes worksheets are assigned. These tasks are assigned to enhance understanding and reinforce subject material covered in lecture and textbook readings.

Graded assignments, including Media Lab assignments, must be completed/turned in prior to clinical rotation on the due date. Media Lab test grades will be counted as a quiz grade. Late assignments will not be accepted and students will receive a "0" score for the quiz grade if not completed on time. Students are reminded to review the Academic Probation policy outlined on page 24 of the Student Handbook.

PROGRAM GRADING AND EVALUATION

CLINICAL ROTATION EVALUATIONS:

1. **Written Examinations:** Written examinations may be given covering material presented in laboratory discussions, instruction at the bench, reading assignments or handouts.
2. **Practical Examinations:** Practical exams are given during or at the end of each clinical rotation. They consist of clinical specimens for quantitation or evaluation using selected procedures presented during the clinical rotation. These exams are designed to assess technical and organizational skills, problem solving skills, and the application of test results in differential diagnosis.
3. **Performance Checklists:** The Clinical Instructor completes a checklist of performance level achieved for each technique presented during the rotation. Students must achieve the expected minimum performance level for each procedure. The checklist is turned in to the program director at the completion of the rotation and kept in the student's permanent file.
4. **Affective Evaluation:** Following each clinical rotation, the clinical instructor completes an affective evaluation assessing student professional behaviors. This evaluation will be included in the calculation of the clinical grade, and the form is used as a basis for counseling. Affective evaluations become part of a student's permanent file.
5. **Criteria for Satisfactory Performance:** 75% or better on all exams.

LECTURE SERIES EVALUATIONS:

Written Examinations: **Quizzes** will be given during a lecture series; a **final exam** will be given at the completion of each lecture series.

A mid-term exam will be given at the middle of the program year to include all didactic material covered thus far. Students must score a minimum 60% on this exam in order to continue in the program.

A timed, comprehensive final exam will be given at the end of the year covering all clinical and didactic material. **Students must pass this exam in order to receive a certificate of graduation.**

Criteria for Satisfactory Performance: An average of 75% or greater must be achieved in each course.

Final course grade:

The clinical component and the lecture component each represent 50% of the final grade. A minimum grade of **75% in each component** is required to pass for the year.

ACADEMIC PROBATION:

Failure to achieve an **average** grade of ≥75% in the lecture component of a course.

Failure to achieve a **minimum** grade of 75% on a practical exam.

Failure to achieve a **final grade** of ≥75% in the clinical component of a course.

A student on academic probation is required to complete make-up work and retesting in the area of deficiency, with a resulting minimum grade of 75%. Failure to do so will result in dismissal from the program due to academic deficiencies.

A student dismissed due to academic deficiencies may reapply one time in order to complete the deficient course work. Failure upon readmission is final.

Letter grade conversions:

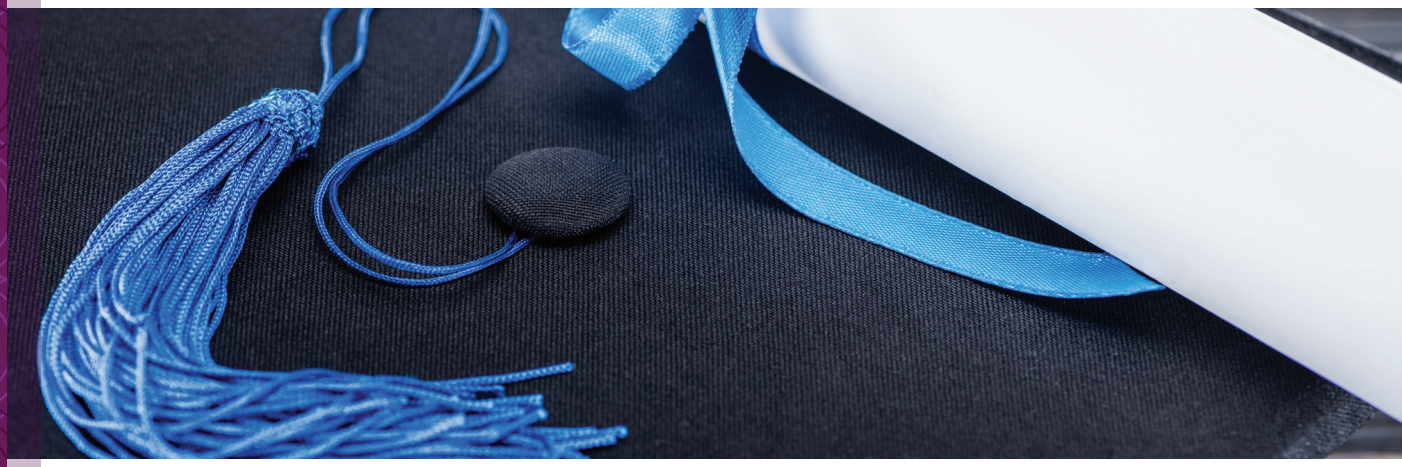
A: 94-100 B: 85-93 C: 75-84 D: 70-74 F: <70

GRADUATION:

For all students in a 3+1 program, grades are reported to the medical laboratory science advisor of the student's college/ university at mid-term and again upon completion of the clinical year. Any student in danger of failing or any student placed on academic probation will have an interview with the Program Director and the college/university medical technology advisor to discuss the situation and determine a course of action.

Medical Laboratory Science advisors from the college/university are encouraged to visit with the student anytime during the clinical year.

Upon successful completion of the program, the student will receive a certificate and a transcript of grades for the clinical year will be sent to the institution granting the degree (not contingent on external certifying exam).



STUDENT SCHEDULES

CLINICAL HOURS:

Students report to assigned laboratory departments daily, Monday through Friday, at the time assigned by the clinical instructor. Hours may vary for a particular rotation or activity. Other than during scheduled lecture time, students are expected to be in the rotation department unless special arrangements have been made with the Clinical Instructor to participate in a different activity. **If clinical hours are canceled for any reason, the student is expected to use that time for study, completion of projects, or involved in a related learning activity (independent).**

LECTURE HOURS:

Lectures are scheduled on a regular basis each week. All students will attend scheduled lecture. **If no lecture is scheduled or a scheduled lecture is canceled, the student will remain in/report to his/her assigned rotation area.**

ATTENDANCE AND TIME OFF

VACATIONS/HOLIDAYS:

Depending on start dates, students may receive four or five scheduled holidays and three extended breaks:

- MLK Day
- Spring Break
- Memorial Day
- Summer Break
- Labor Day
- Fall Break
- Thanksgiving
- Winter Break

EXCUSED ABSENCES (PERSONAL DAYS/SICK TIME)

6 days are allotted for personal leave or illness. You **MUST** notify the Program Director **EACH DAY** that you are ill. Personal leave days MUST be scheduled in advance, with the approval of the Program Director and Clinical Instructor. **These days are not vacation days**. They are to be used for illness, job interviews, etc. Please make every effort to schedule appointments on weekends or after regular hours.

UNEXCUSED ABSENCE:

An unexcused absence results when the student does not pre-schedule a day off or does not notify the Program Director of his/her absence. Students abusing personal leave time will be counseled and may be required to make up the lost time at the end of the year. **A student who receives three counseling sessions regarding unexcused absences will be dismissed from the program.**

TARDINESS:

Every effort should be made to be in lab/lecture at the scheduled time. If a student is going to be late, he/she should text/call **the Program Director** or the laboratory secretary (570-321-2307). **Consistent tardiness will not be tolerated**. If such a situation occurs, the student will receive a verbal warning followed by a written warning if the situation continues. **After 1 written warning, the time will be charged to the student at the rate of 1/2 day for each occurrence, to be made up at the end of the year. Accumulation of more than 2 make-up days will result in dismissal from the program.**

INCLEMENT WEATHER:

The MLS Program is a professional program, and therefore it is expected that every reasonable effort be made to attend lecture/lab instruction at the scheduled time. If a student feels they are unable to safely travel to the hospital by the scheduled time, every reasonable effort will be made by the student to commute to the hospital when travel is possible. The above absence and tardiness policies will be followed in such situations.

CERTIFICATION AND EMPLOYMENT

CERTIFICATION:

Students who complete the program are eligible (and encouraged) to take a national certification exam. In the clinical year, students will be advised of options available for certification. Students may elect to take one or more certification exams. A fee must accompany each application; information will be available from the Program Director.

STUDENT EMPLOYMENT:

Students may be hired as per-diem employees during the clinical year. This status allows students to work limited hours, when such hours are available.

A student may work on **weekends** and during **non-student hours** as long as he/she maintains a passing average. This service work is non-compulsory.

Students will not be substituted for regular staff during school hours. Caution is advised concerning employment due to the academic burden the student experiences during the clinical year. Students working as per-diem employees are subject to all employee rules.

TELEPHONE USE

Personal telephone calls may be made from your cell **during breaks and lunch.**
Cell phones must be silenced during regular laboratory and classroom hours. Incoming personal calls are discouraged except for emergencies. The Program Director's telephone number (570-321-2367) or the laboratory (570-321-2300) can be used for emergency calls in addition to leaving a message on your cell. **No texting, Facebook, Twitter, Instagram, etc. or other related activities are permitted during classroom/clinical hours. No photos may be taken in the technical laboratory in areas where patient specimens/PHI are present.**

COMPUTERS

PCs with internet access are available in the classroom. UPMC computers are to be used for learning purposes only and are not for personal use. All UPMC policies pertain to use of these PCs. CD-Rom and internet accessible programs are included in student assignments.

LIBRARY FACILITIES

The MLS classroom library is available to students on a 24-hour basis. The Medical Library is available Monday through Friday, 8:00 a.m. to 4:30 p.m. Books may be checked out for specific times; periodicals may be used in the library or copies may be made. Staff at the library is very helpful to all hospital personnel. Contact the Medical Library for additional information at 570-321-2176.

SAFETY

During orientation, the student will receive instruction on laboratory safety policies and procedures. Students are expected to follow safety rules and to use personal protective equipment (PPE). Intentional violation of safety regulations will result in a written warning. **Accumulation of two written warnings will result in dismissal from the program.**

The laboratory contains many potential health hazards. No listing of specific safety measures can substitute for ordinary common sense and good laboratory technique. Students should be aware of all safety equipment in the laboratory and become familiar with its use. The following information is essential and will be reviewed during initial orientation and in each rotation section.

1. Knowledge of location and operation of:

- Fire extinguisher
- Fire blankets
- Instructions for emergency action in case of fire or other internal and external disasters
- Telephones and fire alarms
- Eye washes
- Safety showers
- Spill kits

2. Precautions to be observed at all times in the lab:

- Equipment in the laboratory will not be operated or handled prior to being trained in its proper use.
- Inappropriate or unsafe behavior is not permitted.
- Personal protective equipment will be worn as instructed.
- Gloves will be worn according to current policy.
- Smoking is not permitted in the hospital or on hospital property.
- Eating/drinking is restricted to designated areas.
- Hands should be washed when leaving the lab area, i.e. before lunch, breaks, and class.
- Students should be familiar with universal precautions for specimen handling.
- Pipetting by mouth is NOT permitted at any time.
- Pencils, pens, or other objects should not be put into or near the mouth.
- All needles will be disposed of via proper procedure. Care should be taken in handling needles in order to prevent accidental puncture.
- Students should be familiar with the location of the storage area for hazardous chemicals and the procedure for using any chemicals in this area.

3. Reporting of accidents:

- Any potential safety hazard should be immediately reported to the Clinical Instructor, Program Director, or Laboratory Manager.
- All accidents, including needle punctures, should be immediately reported (as above) to insure proper procedure is followed. In case of an emergency, report directly to the emergency room.

ALL ACCIDENTS MUST BE REPORTED.

PARKING

Free parking is available in designated areas. All students must register their cars with Safety and Security (during lab orientation). Students may park ONLY in spaces marked with yellow lines. Parking information will be available during orientation.

EXPENSES

TUITION:

Students are assessed a yearly tuition charge, payable in installments in January and in July. Current tuition rate is $8,500 for the year. The first tuition payment will be billed in January or July (depending on program start) and must be paid within 30 days. The 2nd installment will be due after the first half of the clinical year. Certificates will not be issued until tuition is paid in full.

WITHDRAWAL AND TUITION REIMBURSEMENT POLICY:

Our program is committed to a philosophy of providing assistance necessary to aid the student in completing his/her academic goals. Students are encouraged to seek academic and personal counseling prior to withdrawal. For students who elect to leave the program and request tuition reimbursement, the following policy will be in place, depending upon date of program exit:

- A student voluntarily withdraws from the program because of personal illness, certified by an attending physician, or because of other reasons as may be approved by the Program Director
- Students who decide to withdraw must notify the program director in writing. Failure to do so may cause the student to lose any possible refund. The date on which the original request for withdrawal is filed is considered the official date of withdrawal. Any refund to which the student may be entitled is calculated using this date.
- 30 days within program start: Student receives full-paid tuition reimbursement minus deposit
- 60 days within program start: Student receives 50% reimbursement paid tuition minus deposit
- > 60 days within program start: No tuition reimbursement

PROCEDURE FOR OBTAINING REIMBURSEMENT:

1. Students who are eligible for tuition reimbursement must present a signed letter to Program Director within 30 days of leaving the program, requesting return of tuition paid.
2. Program director will forward request to Finance Department and follow up to assure that student receives correct reimbursement.
3. Student should allow 60 days from date of request to receive reimbursement funds.

TEXTBOOKS:

www.rittenhousebookstore.com

All students receive a pro-forma invoice from Rittenhouse Book Distributors prior to the beginning of the clinical year. This invoice reflects all required textbooks, which will be shipped upon payment of the invoice. Students are not required to purchase from Rittenhouse, but may choose to purchase the same titles/editions from a different source. If purchased new, the estimated cost for textbooks is $650-$750.

HEALTH/LIABILITY

Students are required to purchase and provide proof of liability insurance (minimum $1,000,000 / $3,000,000/year). Cost for liability insurance for the year is approximately $43. Care is available from the employee health nurse for a job-related illness or accident during normal school hours or from the emergency department in a critical situation. Emergency room visits, medication, or hospital admissions are the responsibility of the student.

Students will receive immunizations for hepatitis B and assessment for hepatitis C antibodies, if needed, as part of a health assessment prior to program start. There may be a charge for immunizations and required testing.

Students should be prepared to present a record of previous vaccinations prior to program start.

MEALS

Meals are available in the hospital cafeteria, which serves hot and cold entrees, salads, sandwiches, desserts, snacks, and beverages during posted hours. The Market and Starbucks are also available on the hospital campus for food purchases. Students may choose to carry lunches and eat in the cafeteria, the laboratory lounge, or the classroom. There is **NO EATING OR DRINKING PERMITTED AT THE LABORATORY WORK STATIONS.**

DRESS CODE

The laboratory dress code serves to assure that the laboratory staff presents a professional appearance to our patients and to provide appropriate protection against bloodborne and chemical hazards.

Students will wear scrubs in the laboratory designated color(s). Stockings or socks must be worn with duty shoes or leather athletic shoes (see laboratory dress code provided on admission). No jeans.

PPE lab coats will be provided by the hospital and must be worn at all times while performing clinical work. PPE lab coats will be stored at the hospital and may not be taken home. PPE lab coats should be removed when entering "clean" areas (PPE = Personal Protective Equipment).

NON-ACADEMIC PERFORMANCE CRITERIA

Students must adhere, at all times, to established program, laboratory, and hospital policies and procedures with specific attention to the following:

- No interpretation of results is given to a patient.
- All patient information is kept in strict confidence.
- Students are expected to conduct themselves in a professional manner at all times, both on the hospital campus and while representing the school or the hospital off campus.

DISCIPLINE AND DISMISSAL

GROUNDS FOR DISCIPLINARY ACTION:

1. Excessive tardiness or absenteeism
2. Repeated unauthorized absences from the work area
3. Refusal to obey instructions given by a Supervisor, Clinical Instructor, or other legitimate authority
4. Careless use of equipment and/or supplies
5. Conduct, actions or language which might embarrass patients, employees, students or visitors
6. Repeated violations of hospital policies
7. Conduct detrimental to hospital operation or standing in the community or to the welfare or safety of patients, employees, or visitors.

GROUNDS FOR IMMEDIATE DISMISSAL:

1. Conduct or action which endangers patients, employees, students, or visitors
2. Possession or use of intoxicants or unlawful drugs on hospital premises
3. Theft of any kind
4. Falsification of laboratory test results
5. Violation of confidentiality policy
6. Cheating on written or practical examinations

DISCIPLINARY PROTOCOL:

1. **COACHING:** May be administered for some act of improper conduct, violation of a rule or regulation, improper performance of an assigned task, and/or acts involving a relatively minor degree of seriousness.
2. **WRITTEN WARNING:** Issued in instances which might ultimately lead to dismissal if the unsatisfactory performance continues.
3. **DISMISSAL:** The most extreme form of disciplinary action, to be taken only for a serious act of misconduct or when a student fails to respond to previous warnings, written and verbal. This action will involve the student, Program Director, and the student's Medical Laboratory Science Advisor from their college/university.

GRIEVANCE/APPEALS POLICY

Any problems that occur during the student's rotation should be brought to the attention of the Clinical Instructor, and efforts to solve the problem should begin at this level. (See procedure below under Grievance Procedure)

Students have the right to appeal any decision regarding an unfavorable evaluation, disciplinary action, suspension, or dismissal. Appeals will be handled in an objective manner by a committee which will include representatives from Human Resources, Risk Management, the Laboratory, and a member of the student's choice. (See procedure below under Appeals Procedure)

GRIEVANCE PROCEDURE:

1. If, after a period of discussion, the student feels that he/she is not receiving the proper help or the problem is escalating, the problem should be brought to the attention of the Program Director, who will discuss it with both the student and the Clinical Instructor in order to arrive at an acceptable solution.
2. If the solution does not satisfy the student, he/she may take the problem to the Laboratory Director after first notifying the Program Director. The decision of the Laboratory Director is final.

APPEALS PROCEDURE:

1. Student notifies Program Director, in writing, of intent to appeal within 7 days of action. A copy of the dispute must be included.
2. The Appeals Committee will be formed, meet and render a decision within 7 days.
3. Depending on the nature of the problem, the Program reserves the right to suspend the student pending the outcome of the hearing.
4. **THE DECISION OF THE APPEALS COMMITTEE IS FINAL**.

UPMC WILLIAMSPORT PROGRAM IN MEDICAL LABORATORY SCIENCE AFFECTIVE OBJECTIVES

While participating as a student and upon completion of the program, the student, as a professional in training, shall:

1. Demonstrate respect for the humanity of the patient through maintenance of appropriate attitudes, action, and conversation in patient contact.
2. Demonstrate respect for the rights of the patient through proper collection and handling of specimens and through prompt and responsible reporting of results to the appropriate persons.
3. Perform all assignments honestly.
4. Maintain confidentiality of all information concerning patients. Avoid discussing or divulging any knowledge of patients or hospital business to unauthorized persons or discussions of patients in any place, in or out of the hospital, where unauthorized persons may overhear such conversation.
5. Recognize and accept personal limitations and potentials as a functioning member of the medical laboratory team.
6. Maintain an attitude of inquiry and acceptance for new and proven ideas. Assume responsibility for seeking information and actively participate in all learning activities.
7. Respect other members of the clinical laboratory staff for their knowledge and role in the laboratory. In addition, respect health professionals not immediately connected to the laboratory for their knowledge and role in the delivery of quality health care.
8. Develop an awareness of the role of the Clinical Laboratory Scientist in the total health care system.
9. Develop a sense of responsibility for self-improvement through participation in either the professional society or in continuing education programs.
10. Accept both praise and constructive criticism. Conversely, register complaints and praise with the proper authority.
11. Attend all assigned laboratory and lecture sessions.
12. Complete all laboratory and lecture assignments on time.
13. Report to the Clinical Instructor and/or Program Director when late or absent.
14. Comply with all hospital universal precautions, fire, and security, safety, and traffic regulations.
15. Follow established safety recommendations or rules regarding dress while in the hospital. When in contact with patients, a white lab coat or uniform must be worn.

16. Demonstrate respect for self as a professional and as a human being by:

    a. Not coming to school/work under the influence of intoxicants or narcotics; neither shall such items be brought into the hospital, or used during working hours.

    b. Not stealing or deliberately destroying hospital or personal property.

17. Abide by any additional regulations from the Laboratory Director, School of Medical Laboratory Science Administrators, or Hospital Administrators.

The Program Director will meet periodically with each student, on an individual basis, to keep him/her informed of their overall progress in the program. **The Program Director has an open door policy** so students may feel free at any time to stop in and discuss particular assignments, individual test scores, or overall progress. All discussions will be held in confidence. All clinical faculty are also available throughout the day to discuss progress. If you have a question or problem that requires additional thought, that faculty member and the program director will meet with you to help resolve the problem. Please feel free to talk with us. Our goal is your success!

COLLEGE CREDIT

Credits earned are reported to the college/university in the following manner:

001 Clinical Chemistry	(8 credits)
002 Clinical Microbiology	(8 credits)
003 Clinical Hematology/Coag	(6 credits)
004 Clinical Immunohematology	(6 credits)
005 Clinical Immunology/Serology	(2 credits)
006 Clinical Seminar	(2 credits)
TOTAL CREDITS AWARDED	**32 Credits**

CONFIDENTIALITY

Confidentiality is an important aspect of professionalism. Every student has a responsibility to respect the confidential nature of the health care profession and should take extra care that discussions involving patient information not be conducted in inappropriate areas such as hallways, elevators, cafeteria, etc.

Students have a legal, moral, and ethical duty to ensure a patient's privacy and to hold in strictest confidence all information related to hospital patients. HIPAA training will be provided for all students as part of hospital orientation.

Requests for information from any person/group outside of the hospital should be referred to the Marketing/Corporate Communications office.

A breach of confidentiality is grounds for immediate dismissal from the program.

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