

RHODE ISLAND HOSPITAL SCHOOL OF MEDICAL TECHNOLOGY CATALOG

RHODE ISLAND HOSPITAL GENERAL INFORMATION

Rhode Island Hospital is a modern 719-bed general hospital serving the State of Rhode Island and the surrounding communities of southeastern Massachusetts. Founded in 1863, the hospital has a long history of service to the community and is a principle teaching hospital for the Medical School of Brown University. In August of 1994, Rhode Island Hospital became a founding partner in LIFESPAN, a consortium of hospitals and other health services including The Miriam Hospital, Bradley Hospital, Newport Hospital, VNA of Rhode Island and Hospice Care of Rhode Island. Soon after, the Rhode Island Hospital, Miriam Hospital and Bradley Hospital were further re-structured into the Lifespan Academic Medical Center (AMC). The Lifespan AMC Mission Statement adopted by the Board of Trustees and the administration included the following: "The hospital is strongly committed to education and research in partnership with the Brown Medical School and other allied health educational programs". Rhode Island Hospital fulfills this goal in part by supporting the School of Medical Technology and by supplying necessary space and budget for its educational activities.

SCHOOL OF MEDICAL TECHNOLOGY

The school is sponsored by the RI Hospital Department of Pathology and is under the direction of Joseph Sweeney, M.D., Medical Director, and Theresa Tellier-Castellone, M.P.H., MLS (ASCP)^{CM}, Program Director.

The School is a member institution of the Board of Rhode Island Schools of Allied Health (BRISAH). BRISAH is a consortium of three college/universities Clinical Laboratory Science (Medical Technology) programs and two Schools of Medical Technology in the state. The purpose of this consortium is to integrate individual teaching programs of the hospital's Schools of Medical Technology into a coordinated didactic experience. The consortium also contains representation from the Cytology, Histology, and Medical Laboratory Technician Programs in Rhode Island

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) –5600 N River Rd., Suite 720, Rosemont, Illinois 60018; Tel. (773) 714-8880.

Students completing the clinical year of professional studies receive a certificate of completion from Rhode Island Hospital that indicates successful completion of all required courses and clinical experiences. In addition, students who are enrolled in one of the affiliated institutions receive a Bachelor of Science degree in Medical Laboratory Science from that institution. Students are also eligible to take any one of the available certifying examinations designed for generalists in the field of Medical Laboratory Science/ Medical Technology.

The successful completion of the program is not contingent upon the student passing any type of external certification or licensure examination.

Philosophy. The School of Medical Technology provides the student with didactic and field experiences required for working in a laboratory within a hospital, public health, private or industrial setting. This clinical academic year is part of a four-year baccalaureate program providing academic experiences that will enable the qualified student to graduate from a college or university and then pursue graduate studies. Students with earned degrees in related disciplines are also offered the opportunity to complete a year of professional study should place be available.

Within the curriculum, the school provides instruction and exposure to the necessary experiences which lead to the development of a competent practicing Medical Laboratory Scientist (Medical Technologist). This means that the graduate should be able to identify a problem, research the knowledge relating to it, evaluate the situation, and make decisions concerning solutions within the range of his/her educational and technical understanding. In addition, because Clinical Laboratory Scientists/ (Medical Technologists) are placed in positions of leadership within the laboratory, the school also provides opportunities which will begin development of supervisory and management skills. In general, the experiences are broad enough in technical and professional scope that the student is made aware of the various aspects of this field. This awareness is the structure upon which the employer can build to develop the student's fullest potential as a productive member of the laboratory staff and as a competent member of the healthcare team.

NAACLS's DESCRIPTION OF CAREER ENTRY OF THE CLINICAL LABORATORY SCIENTISTS / MEDICAL TECHNOLOGISTS:

At career entry, the clinical laboratory scientist/medical technologist will be proficient in performing the full range of clinical laboratory tests in areas such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular and other emerging diagnostics, and will play a role in the development and evaluation of test systems and interpretive algorithms. The clinical laboratory scientist/medical technologist 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. The clinical laboratory scientist/medical technologist 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. The clinical laboratory scientist/medical technologist will also possess basic knowledge, skills, and relevant experiences in:

- A. Communications to enable consultative interactions with members of the healthcare team, external relations, customer service and patient education*
- B. Financial operations, marketing and human resource management of the clinical laboratory to enable cost effective, high-quality, value-added laboratory services*
- C. Information management to enable effective, timely, accurate, and cost-effective reporting of laboratory-generated information*
- D. Research design/practice sufficient to evaluate published studies as an informed consumer.*

SCHOOL OF MEDICAL TECHNOLOGY GENERAL CAREER ENTRY COMPETENCIES:

Objectives. Objectives are used by this school to aid both the students and the instructors in organizing learning and teaching efforts and activities. The objectives given are minimal and may be enlarged upon according to the ability and interest of the student.

Cognitive Domain. Upon completion of the program, the student will:

1. Demonstrate an understanding of basic science concepts applicable to medical laboratory procedures.
2. Demonstrate an understanding of theoretical concepts received during BRISAH lectures by applying these concepts to laboratory procedures and their interpretation.
3. Demonstrate an in-depth knowledge of principles, methodology, and clinical correlation of laboratory tests.
4. Demonstrate the use of computers in specimen processing, reporting results, and data inquiry.
5. Organize and perform a large number and variety of laboratory tests with accuracy and with minimal supervision.
6. Use and maintain laboratory instruments to perform analyses responsibly and accurately, demonstrating knowledge of sources of error and methods of correction.
7. Recognize and identify problems within the laboratory and take remedial action if necessary.
8. Demonstrate the use of quality control in the validation of test results and instrument performance
9. Interpret results, which provide data for diagnosis and treatment.
10. Demonstrate leadership characteristics and basic supervisory skills.
11. Demonstrate teaching abilities and recognize that teaching is the responsibility of each Clinical Laboratory Scientist (Medical Technologist.).

Affective Domain. 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. The professional will not discuss or divulge any knowledge of patients or hospital business to unauthorized persons; or hold discussions of patients in any place, in or out of the hospital, where unauthorized persons may overhear such conversation.
5. Learn to 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. As part of this, the professional will 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 shall be shown for 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 (Medical Technologist) 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, the professional shall 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 Laboratory Supervisor and/or Program Director when late or absent.
14. Comply with all hospital universal precautions, fire, security, safety, and traffic regulations.
15. Follow established safety recommendations or rules regarding dress while in the hospital. When in contact with patients, white lab coat or uniform and "safe" shoes must be worn. Long hair must be worn up off the shoulders. No loop earrings, necklaces, or bracelets may be permitted.
16. Demonstrate respect for self as a professional and as a human being by
 - a. not coming to 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 Technology Administrators, or Hospital Administrators.

ADMISSIONS

Student Pool. The School of Medical Technology is currently affiliated with colleges and Universities in Rhode Island. The colleges are Rhode Island College, Salve Regina University and University of Rhode Island.

Selection of students is made first from applicants enrolled in the Clinical Laboratory Science (Medical Technology) programs in these colleges. Consideration is then given to applicants who have received appropriate college credits in Biology and Chemistry from non-affiliated colleges. If all other factors are equal, preference will be given to Rhode Island residents. **The program does not grant advanced standing to applicants with prior clinical experience.** Rhode Island Hospital is an Equal Opportunity employer and supports the concepts of equal opportunity based on merit. Once students are accepted, they are required to adhere to all policies and procedures found in the School Catalog.

Application Materials. All applicants must also submit a signed statement (provided with the application) that they have read, understood, and met the Technical Standards/ Essential Functions and Career Entry Level Competencies published in the catalog.

Applicants will be notified should the application be incomplete. It is the responsibility of the student to insure all application materials are submitted to the school in time for consideration. The closing application date is **November 1st**. If the application meets all requirements, students will be contacted for an interview.

ACADEMIC ADMISSIONS STANDARDS

Prerequisites. Prerequisites for admission are satisfactory completion of at least three years in an accredited college or university. Prerequisite college courses and numbers of credits required shall be those that are necessary to assure admission of students who are prepared for the education program. Prerequisite content areas shall include general chemistry, organic and/or biochemistry, general biological sciences, microbiology, immunology, and mathematics. Survey courses do not qualify as fulfillment of chemistry and biological science prerequisites. Remedial mathematics courses will not satisfy the mathematics requirements.

All applicants must have an overall cumulative grade point average (GPA) of 2.5. In addition, a GPA of 2.5 for all science and mathematics courses taken is required by those students enrolled in or graduated from an affiliated institution.

Required Coursework

Applicants must complete:

- 16 semester hours (24 quarter hours) of Chemistry courses. 1 semester of Organic Chemistry is required, and 1 semester of Biochemistry is required.
- 16 semester hours (24 quarter hours) of Biology courses. Microbiology & Immunology are required.
- One course in Mathematics is required.

Transcripts for all students must be evaluated by the Program Director for the School.

U.S. Residents: Students or graduates from colleges/universities in the U.S. must submit a copy of their official transcript to the school along with an application form.

International Students. Graduates from international universities or colleges must also send a copy of their official transcript to an appropriate evaluation agency. **Acceptable evaluation agencies for foreign transcript evaluations can be found at www.ascp.org.**

If the applicant's native language is not English, the applicant is required to take the TOEFL examination and provide a score report for the Medical Laboratory Science Program Director. Each applicant's ability to communicate in the English language will be considered on the basis of TOEFL scores as well as fluency in spoken English during the interview.

An official transcript evaluation demonstrating approval of completed requirements and U.S. Degree equivalency must be received prior to admission. Proof of course completion is necessary if deficiencies are indicated. This would include any course work completed more than seven years ago or any additional courses as prescribed by appropriate agency. Further evaluation of additional materials is provided through guidance of Program Director.

Recommended Courses. Strongly recommended, but not required, are courses in genetics, biostatistics, Parasitology & Molecular science and basic computer sciences. (**NOTE:** Although these are not entrance requirements for the school, they may be requirements for the university/college program.)

TECHNICAL STANDARDS / ESSENTIAL FUNCTIONS:

Technical standards as distinguished from academic standards refer to those physical, cognitive and behavioral abilities required for satisfactory completion of all aspects of the curriculum, and the development of professional attributes required by the program officials and clinical faculty of all students upon graduation. These essential abilities required by the curriculum are in the following areas: motor, sensory, communication, intellectual (conceptual, integrative, and quantitative abilities for problem solving) and the behavioral and professional aspects of the performance of a Clinical Laboratory Scientist. These standards consist of minimal physical, cognitive, and emotional requirements to provide reasonable assurance that students can complete the entire course of study and participate fully in all aspects of clinical training.

Although the school remains committed to the principle of equal opportunity and opposed to discrimination of any form, it is important to recognize that the affiliation agreements with the colleges and universities bind the school to do everything reasonable to ensure that its graduates become fully competent practitioners. Acquisition of competence is a lengthy and complex process, which will be subverted by significant limitations on the student ability to participate fully in the spectrum of experiences provided in the clinical laboratory setting.

Standards – Essential Functions

The Clinical Laboratory Science student must have functional use of the somatic senses, responding to both external and internal stimuli, and of the senses of vision and hearing. They must have adequate motor capabilities to negotiate situations in which these senses would be employed. The student must be able to integrate data and directions acquired via these senses. Although some compensation through technology for these deficiencies is available, such compensation should not preclude the students' ability to act reasonably independent of others. The school is committed to the principle of equal opportunity and adheres to the hospital's non-

discriminatory policies. When requested, the school will provide reasonable accommodation to otherwise qualified students with disabilities.

Standards – Essential Functions

The following technical standards are identified as essential requirements which must be met by all students in order to complete the program and insure entry level competence in professional practice.

Observational Skills *(use of visual, auditory, and somatic senses)*

The student must be able to:

- 1) observe laboratory demonstrations in which human specimens (blood, body fluids, tissues, culture materials, etc.) are analyzed for their biochemical, immunological, microbiological, or hematological components.
- 2) characterize the color, odor, clarity, and viscosity of biological specimens, reagents, or biochemical products.
- 3) employ a clinical microscope to discriminate among fine structural and color differences (hue, intensity, and shading) of microscopic preparations.
- 4) read and comprehend text, numbers, and graphs displayed in print and on video display monitors.

Motor Function Skills *(physical motor skills, tasks, or responses)*

The student shall be able to:

- 1) move freely and safely about the clinical laboratories.
- 2) reach laboratory bench tops, shelves, patients lying on hospital beds or seated in specimen collection chairs.
- 3) travel to various clinical laboratories both on and off campus for practical experiences provided by the curriculum.
- 4) perform moderately taxing continuous physical work, often requiring prolonged sitting or standing over several hours.
- 5) maneuver equipment required to safely collect laboratory specimens in both an inpatient and outpatient setting.
- 6) operate laboratory equipment (i.e. pipettes, test tubes, inoculating loops) and adjust instruments to perform laboratory procedures.
- 7) use an electronic keyboard to operate laboratory instruments and to calculate, record, evaluate and transmit laboratory information.

Communication Skills *(oral and written communication)*

The student shall be able to:

- 1) read and comprehend technical and professional materials including laboratory procedures, instructional manuals, technical manuals, textbooks and other reference materials in the laboratory.
- 2) follow verbal and written instructions in order to correctly and independently perform laboratory procedures.

- 3) instruct patients on specimen requirements prior to their collection to insure validity of specimen for analysis.
- 4) effectively and sensitively communicate with patients regarding laboratory tests.
- 5) maintain confidentiality in appropriate communications with patients, physicians, and other healthcare professionals regarding laboratory results or other patient information.
- 6) communicate effectively with faculty, staff, and other healthcare professionals both verbally and in writing (typed reports, written messages, or telecommunications).
- 7) independently prepare laboratory reports, papers, or other written assignments required in the program.
- 8) complete examinations provided in within-paper format, computer-assisted format and laboratory practical format.

Intellectual Skills (*conceptual, integrative, quantitative skills*)

The student must be able to:

- 1) demonstrate the cognitive abilities necessary to master relevant content in the clinical laboratory courses at a level deemed appropriate by the faculty.
- 2) comprehend, analyze, integrate and synthesize clinical information or data as it relates to laboratory tests and procedures.
- 3) accurately quantify, mathematically calculate, or extrapolate data related to laboratory tests.
- 4) develop reasoning and decision making skills appropriate to the practice of clinical laboratory science.
- 5) exercise sufficient judgment to recognize and correct deviations in performance.

Behavioral/Social Skills (*responsibility, integrity, professionalism*)

The student must:

- 1) be able to manage the use of time and be able to systematize actions in order to complete professional and technical tasks within realistic constraints.
- 2) possess the emotional health necessary to effectively employ intellect and exercise appropriate judgment.
- 3) be able to provide professional and technical services while experiencing the stresses of emergent demands (i.e. stats orders) and distracting environment (noise levels, crowding, complex visual stimuli).
- 4) be flexible and creative when adapting to technical and professional changes in the laboratory.
- 5) recognize potentially hazardous materials, equipment, and situations and proceed safely in order to minimize risk of injury to patients, self, and colleagues.
- 6) support and promote the activities of fellow students and of healthcare professional to promote a team approach to learning, problem solving, and overall patient care.
- 7) be honest, compassionate, ethical and responsible.
- 8) be forthright about errors or uncertainty.
- 9) be able to critically evaluate self performance, accept constructive criticism and look for ways to improve performance.

APPLICATION FOR ADMISSIONS

All prospective students fill out the same application form. This form may be obtained by visiting <https://www.lifespan.org/centers-services/rhode-island-hospital-school-medical-technology> or writing to:

Program Director
School of Medical Technology
POB Room # 034
Rhode Island Hospital
593 Eddy Street
Providence, Rhode Island 02903

The application, an official copy of the college transcript and three letters of reference are required. One of these references must be from someone who can attest to your academic capabilities; the remaining two can be from an employer or a personal reference.

All applicants must also submit a signed statement (provided with the application) that they have read, can understand, and can meet the Technical Standards/ Essential Functions and Career Entry Level Competencies published in the catalog.

Applicants will be notified should the application be incomplete. It is the responsibility of the student to insure all application materials are submitted to the school in time for consideration. The closing application date is November 1st.

An initial screening of students enrolled in a Clinical Laboratory Science (Medical Technology) program at an affiliated College/University is made by the College Coordinator. Each of these institutions may recommend a maximum number of students to the BRISAH Admissions Committee.

Rhode Island Hospital's School of Medical Technology accepts an average of 12 students each year. It is the policy of the program to accept students from Rhode Island College, University of Rhode Island, and Salve Regina University first. The placement of affiliated students is completed by December each year. Those affiliated students who were not placed will be put on the official waiting list for that academic cycle.

If space is available, initial screening of all other applicants will be made by the Program Director at Rhode Island Hospital. Applicants meeting the criteria will be asked to come in for an interview; those not meeting the criteria will be notified immediately by letter or email. All non-affiliated students will also be placed on the official waiting list after successfully completing the interview. Non-affiliated students will only be considered after initial selection of the class is made from students in affiliated programs and if placement is available.

Interview. All applicants under consideration are required to have an interview with the Program Director. The purpose of the interview is to meet with the prospective student and to more fully explore the applicant's reasons for attending this school. The interview is used to help evaluate the applicant's ability to communicate, poise, self-confidence, maturity, and professional attitude.

Students enrolled in an affiliated institution are interviewed at the hospital by the BRISAH Admissions Committee. The interview is conducted in the presence of the College Coordinator and is initiated by a member of the Admissions Committee. After the interviews are completed, students are ranked numerically based on their pre-interview rubric score and their interview rubric score. Prior to interviews, students are evaluated based on academic performance (GPA), recommendations, application completeness, and essay quality. Interview responses are evaluated using a rubric to calculate an interview score. By combining the pre-interview rubric evaluation score and the interview score, an overall score is calculated. Each member of the admissions committee submits an overall interview score for each student interviewed and the Program Director averages each score. The average score is used to rank each student. If a member of the admissions committee is unavailable for interviews occurring outside of scheduled interview sessions, the decision of acceptance and rank is ultimately left to the Program Director.

Once the student rank is reached, the Program Director assigns each student to a clinical site of either Rhode Island Hospital or Our Lady of Fatima Hospital. Any suggestions of placement from the BRISAH Admissions Committee and/or the college coordinator are seriously considered during the placement process. Placement of students is done in accordance with BRISAH Placement Policy to insure fairness and equal distribution of affiliated students.

All other applicants are interviewed by the Program Director of the School of Medical Technology at Rhode Island Hospital. If any problems should arise, the applicant would also be interviewed by the Medical Director. Final selection of all students is made by the Program Director.

BRISAH Placement Policy. All students who earn a place in the internship are placed at one of the two affiliated institutions – Our Lady of Fatima Hospital or Rhode Island Hospital. Placement of students is based on an average final profile score, input from the Admission committee and the best interest of each student.

A final profile score for each student is tabulated using the pre-interview rubric score and the interview rubric score. All students are then ranked in order from highest profile score to the lowest. If the number of applicants exceeds the maximum number of students which can be accepted, those students are placed on a waiting list for that academic cycle.

The program director then chooses the maximum number of students for each site based on the total profile, Admission committee input, and best interest of each student creating two classes of equal strength academically and personality.

Notification of Acceptance. The accepted applicant receives a letter notifying him/her of the BRISAH Admissions Committee decision. Once the applicant confirms his/her desire to enter the program, he/she will receive further information describing the clinical year of professional studies at Rhode Island Hospital.

In the event the student is unable to accept the placement or withdraws prior to the beginning of class, the Program Director will select the next best qualified student for placement from the official waiting list mentioned previously. All students selected from the waiting list will be placed in the program based on the same criteria, rules, and ranking used to select the original class.

Students not placed in the program must indicate their intentions to remain on the waiting list for consideration and may re-apply in the following year for the next class if they choose to do so.

Physical Exam and Proof of Immunization. No student shall be officially admitted to the class until the school has received a completed health record for the applicant. Students are required to have a physical examination by a physician or certified physicians assistant. Physical examination forms will be provided to the applicants by the school. The following hospital requirements must be included in the health physical.

- The student must have a PPD Test (Purified protein derivative tuberculin skin test) within one year of admissions date. The Tine Test is not acceptable. If the student has a Positive PPD, a report of a chest x-ray done within one year is required.
- The student must have proof of immunity to Rubella (German Measles) by a blood test. If the student receives the test and is found to be susceptible to Rubella, the student must submit written proof of a Rubella vaccine from his/her physician.
- The student must provide written documentation of having had measles (disease) from a physician or proof of having received two measles vaccines since the student's first birthday. This measles policy applies to all students born on or after 1957.
- The student must provide proof of immunity to Varicella (chicken pox) either by titer or written proof of having had the disease signed by a physician. The student must provide a history of having or not having had Mumps. No titer is required for proof of immunity to mumps. Students who have a titer showing no immunity to chicken pox or have no previous exposure to mumps may be accepted. The Director will discuss the need for students to inform the school of any exposure to either disease. These records are reviewed and maintained by the Medical Director of the School for one year of training.

All expenses for the physical exam, immunizations, laboratory tests and related health requirements are the responsibility of the student. The Hospital's Employee Health Services does not assume responsibility for the health of the student enrolled in the program.

Students will be notified by the Program Director if any hospital requirements regarding the students' health record is deficient or incomplete. Failure to meet the immunization and general health requirements established by the hospital may result in denial for placement of that student in the Program.

Description of Facilities. A suite of 5 rooms (student classroom, student library, student microscopy room, program director's office, and secretary's office) is provided for the School of Medical Technology in the Physicians Office Building (POB) Suite #034. The school is located a short distance from the clinical laboratories on the 11th and 12th floors of the APC (Ambulatory Patient Care) Building. The classroom is used for the BRISAH Lecture series each Monday, didactic instruction/reviews for clinical rotations (Tuesdays-Fridays), student and faculty meetings, and for administration of laboratory examinations. Most of the clinical/technical instruction is done (Tuesday – Friday) in designated areas in the laboratories that are located at both Rhode Island Hospital and The Miriam Hospital.

The AMC laboratories as a unit perform well over 9.5 million tests annually. The Lifespan AMC laboratories are accredited by the College of American Pathologists (CAP). The Blood Banks are also accredited by the American Association of Blood Banks (AABB).

Approximately 350 people staff the laboratories between the hours of 8:00 AM and 5:00 PM at both sites. About 50 of the staff are designated as clinical faculty and are involved in some capacity teaching students in the laboratory. Due to the number of the faculty and complexity of the program, a Faculty Coordinator has been designated for each laboratory rotation in the program. This individual has the major responsibility for coordinating teaching duties, practical exams/unknowns, and student evaluations within his/her area. The individual is usually the Manager or Technical Specialist for that laboratory. In some cases, this person takes on the actual performance of teaching, while others assign the teaching to qualified members of the laboratory staff who serve as clinical instructors.

Library Resources. The hospital staffs and supplies a medical library within the complex. This library is located in Aldrich building -1st floor and is primarily for use by physicians, residents and researchers; however, students from nursing and allied health disciplines may also use the library for reference.

Within the School of Medical Technology, a library is maintained solely for use by its' students. Students have access to textbooks, audio-visual, and computers throughout the year. Some assignments for laboratory rotations require specific use of resources provided in the school library. The library also provides a quiet place for students to study both during and after school hours.

The School Year. The school year is 47 weeks, beginning with an eight week "intensive session" in June. After this orientation period, the student will spend approximately six hours of each week (Mondays) in formal BRISAH lecture sessions; the remainder of the time (Tuesday - Friday) is spent in clinical laboratory rotations.

College Courses/Credits. The student earns a total of 32 credits upon completion of the program. The number of credits given per course has been determined by the colleges and is written into the affiliation agreements between the college and the hospital. Because there are differences among institutions, this information is not included here. However, the information is available by contacting the Program Director at Rhode Island Hospital or the College Coordinator at the particular college or university. A typical example of course/credit assignments is provided below:

Clinical Microbiology	(lecture and laboratory)	(8 credits)
Clinical Chemistry	(lecture and laboratory)	(8 credits)
Hematology	(lecture and laboratory)	(6 credits)
Clinical Immunology	(lecture and laboratory)	(2 credits)
Immunohematology	(lecture and laboratory)	(4 credits)
Molecular Pathology	(lecture and laboratory)	(2 credits)
Professional Topics	(lecture and research project)	(2 credits)

Grades. The final number grade sent to the college from the hospital is an average of grades from laboratory examinations and assignments, lecture examinations, and performance evaluations. Based on 100%, this means that 60% of the total is laboratory, 30% is lecture, and

10% is performance/attitude. A detailed evaluation schedule is provided to each student before beginning the program.

Review Subjects. Before entering the clinical year, all students should be familiar with the following topics. In general, these subjects are not part of the formal lecture series in BRISAH. However, because these particular areas are so important to the basic understanding of work in the clinical laboratory, it is assumed that the student has been exposed to this information.

Chemistry, Physics, and Mathematics

1. Proper use and care of glassware, the analytical balance spectrophotometer, and the pH meter.
2. Principles of optics and sound; light, color, wavelength, spectrum; kinetics (zero, first and second order); freezing point determinations (osmolality); fluorescence, emission, absorption; types of filtration and filters; dilution, and basic electronics.
3. Instrumentation: The spectrophotometer: Selection of wavelength, O.D. and % T, construction and use of a standard curve with linear and semi-log paper. The principles and operation of the pH meter.
4. Mathematics: College mathematics, including use of logarithms and slide rule; statistics; mathematics of solutions.

Anatomy and Physiology

1. Orientation to the human systems - location and function of human organs.
2. Basic cell physiology, including metabolism, replication, structure and other functional properties of the cell.

Microbiology

1. Taxonomy, terms of bacterial physiology, epidemiology of pathogenic organisms, growth requirements, aseptic technique, sterility procedures, and culture techniques.

Mycology

1. Basic terms, use of media in identification, growth requirements, and common fungal pathogens.

Parasitology

1. Taxonomy, terms, life cycles of common parasites and diseases resulting from parasitic infection.

Immunology

1. Basic terminology, antigen/antibody relationships, principles of human immunity.
2. Direct and indirect testing for antigens and antibodies, recognition of in-vitro test limitations, use of vaccines, toxoids, and immunoglobulin therapies.

Clinical Training. At the beginning of each year, the student is given a handbook containing a description of the major components of the clinical year. The handbook serves as a general reference for all school policies. Syllabi for each course (didactic component plus laboratory component) are also provided to the students. All course specific objectives, reading assignments, etc. are provided to the student by way of the specific rotation course found in the learning management system, Canvas.

SUMMER INTENSIVE SESSION

BRISAH "Intensive" Session: The clinical year of training begins with an eight-week summer session in July. This intensive session is provided under the coordination of BRISAH for all students beginning their clinical practicum at the hospital. There are three major reasons for including this session. The first is to review and to apply the clinical laboratory material learned in college. For example, lectures on instrumentation will include reference to optics and electronics--information that should have been part of the college physics classes.

The second reason for holding this intensive session is to introduce basic principles of various scientific disciplines in the clinical laboratory and provide a common foundation of understanding for students prior to the beginning of clinical rotations in the laboratory. Lectures and/or some student laboratory sessions are given in the areas of Urinalysis, Blood Bank, Hematology, Parasitology, Phlebotomy, Clinical Chemistry and Microbiology.

Finally, this BRISAH summer session serves as a time in which students become acquainted with members of their class. It also provides an opportunity for students to meet the Program Director and instructors from the school and from other participating hospitals.

Hospital Orientation. During the eight-week BRISAH Summer Intensive, the School also conducts Hospital Orientation for the Medical Technology class. This time is scheduled to get students acquainted with the hospital campus, the school's facilities and the hospital's teaching staff. Members of the faculty from each laboratory section meet with the class to review each specific rotation. This provides the student with a better understanding of planned experiences, work assignments, and instruction methods used for the clinical practicum. It also provides the class with time to tour each laboratory and meet participating faculty for the year ahead.

Lectures. The BRISAH lecture series begins in July and continues until May. No lectures are given on holidays. A synopsis of the material covered by the lectures is included in the text. (The number of hours given per section is an average and may change from year-to-year.)

Microbiology (50 hours). This course covers topics in routine bacteriology, parasitology, mycology, virology, and mycobacteria. Discussions include the mechanisms of pathogenicity, anaerobes, mechanisms of antimicrobial susceptibility, definition and composition of viruses, the differences between micro-organisms and viruses, methods by which viruses replicate, the major human viruses, the means by which viruses spread, properties used to characterize and classify viruses, methods by which laboratories isolate and identify viruses, classification schema of fungi, definitions of the commonly used terminology in mycology, methodology used by the laboratory in identifying fungi, the fungi most implicated in human disease, the pathology of diseases produced by fungi, basic physiology and life cycles of parasites, geographic distribution and environmental effect on parasite, vector, host relationship,; diagnostic criteria for identification of clinically significant parasites, pathogenicity and transmission of parasites, and symptomatology and disease states associated with discussed parasites.

Hematology (60 hours) This course covers topics in Hematology, Urinalysis, and Coagulation. Hematology discusses the maturation process and role of the erythrocyte, myeloid, and lymphoid cells. Disease states associated with each cell line, laboratory identification, testing, symptoms, etc. are discussed. Urinalysis covers the normal physiology and function of the kidney, several biochemical tests routinely performed on urine specimens, microscopic examination of urine sediments, observation and identification of crystals, cells and casts and the possible indication of abnormality or underlying disease in the patient. Coagulation (hemostasis) discusses normal and abnormal hemostasis, the theories of coagulation, the role of factors within that system, and the manifestation of disease related to abnormalities within the system, including platelet and vascular abnormalities.

Immunoematology (30 hours). This course covers topics in the development and chemical structure of blood group antigens, the correlation of physical properties of the antigens and antibodies with testing procedures, the role of complement in the blood bank, compatibility testing, antibody identification procedures, the inheritance patterns of blood groups, hemolytic disease of the newborn, transfusion reaction, the preparation and use of components, HLA theory and testing, and donor requirements and testing.

Professional Topics (30 hours) This course will present contemporary theories and practices used in the management of the clinical laboratory in a hospital setting. Topics include: Human Resource Management, Quality Assurance, Proficiency Testing, Laboratory Information Systems (LIS), Laboratory Accreditation, Financial Resource Management, and Safety. Professional topics include: certification, personnel licensure, professional societies, government regulations, a Capstone project, educational methodologies, medical ethics, and communication in the workplace.

Chemistry (38 hours). This course covers topics in instrumentation; water and mineral metabolism; buffer systems and acid-base balance; carbohydrates; lipids; proteins, including nitrogen and purine metabolism, enzymes, and liver function tests; toxicology; drug monitoring; vitamins; and hormones. At the appropriate times, pathophysiology lectures describing the changes that occur with altered chemistry are presented.

Immunology (12 hours). This course covers topics centered on the reaction of antigen with its antibody and the role of the laboratory in the detection of antigens and antibodies. Additional discussions include defining disease states associated with abnormal functioning of the immune system: allergy, hypersensitivity, cancer, autoimmune etc.

Molecular Pathology (14 hours). This course covers topics on DNA structure, properties, and function in the cell with a focus on molecular techniques such as PCR (polymerase chain reaction). How these methods are used in the laboratory as a diagnostic tool in detecting DNA of infectious agents (viruses, bacteria, fungi, etc.), genetic mutations in coagulation and hematologic disorders, and neoplastic mutations in a variety of cancers. This course also covers topics which introduce the general concepts in pathology. These concepts are the basis for further discussions on the pathophysiology of specific organs or systems and for the demonstration of clinical correlation with disease states.

Clinical Laboratory Rotations:

Hematology Laboratories (8 weeks). The Hematology service in this hospital includes both routine and special hematology laboratories. During the rotation, the student is expected to master the routine procedures performed in hematology, and to become familiar with the specialized hematology procedures. Under supervision of the Hematology Instructor, the student will perform routine CBC (Complete Blood Counts) using hematology instrumentation for cell counts, indices and other laboratory data. The student will also learn to perform a differential count on blood smears using the microscope to evaluate normal and abnormal cell morphology. Another portion of the rotation is spent in special hematology where students are introduced to flow cytometry, hemoglobin electrophoresis, and other specialized testing.

While in Hematology, students are assigned to the technologist responsible for the teaching activities in a selected topic. On those days when the technologists are scheduled to teach, they are relieved of routine duties and can devote the necessary time to the instruction of the students. It is felt that this teaching arrangement serves to 1) give the students a firm basis in both the theoretical and practical applications of Hematology, and 2) strengthen the working Medical Laboratory Scientist's understanding of the procedures done in this laboratory.

Coagulation Laboratory (1 Week). In the Coagulation Laboratory the student becomes familiar with the terms, concepts, and tests involved in the study of hemostasis. The rotation is divided into routine coagulation laboratory which introduces the student to instrumentation used for commonly ordered tests and the special coagulation laboratory in which the student is exposed to factor assays, platelet function test, and other specialized procedures.

Blood Bank/Transfusion Service (4 weeks). The Blood Bank rotation is divided into two sections. The first section includes a series of BRISAH lectures which give basic information on the ABO and Rh systems, compatibility testing, and detection and identification of irregular antibodies. These are provided in the beginning of the year during the Summer Intensive Session to insure that all students have some basic theory in blood bank before starting the laboratory rotation.

The second section includes the time spent in the laboratory. In this area, the student is assigned to the Lead Technical Specialist. This person has been designated as the Faculty Coordinator/Instructor for all the students, and is responsible to see that opportunities are provided so that all objectives may be met. Students will learn the basics of transfusion medicine, including crossmatch, antibody identification, product preparation, etc. In addition to the lab rotation, the student will spend one day at the Rhode Island Blood Center where they interview donors, observe phlebotomy and observe the preparation of blood components.

Microbiology Laboratory (6 weeks). Microbiology is a six-week rotation divided into the following assignments: Planting cultures/gram stains, rapid molecular testing, vitek (1 week), Bacteriology (3 weeks), Mycology/Mycobacterium(1 week) and review/unknowns (1 week).

The work assignments within Microbiology have been designed so that all personnel rotate through the different areas. Students are assigned for one week to the member of the laboratory staff responsible for the bench at that particular time.

The student is given the opportunity to actively participate (under the technologist's supervision) in the workings of that bench. To help evaluate performance, a series of unknowns is given to the student who then must identify all organisms accurately using a minimal amount of media. It is the responsibility of the Faculty Coordinator to review the results of the unknowns, to review the entire rotation with the student, and to ensure that all the objectives are met by the student.

Clinical Immunology/Serology Laboratory (3 weeks). The Serology rotation is three weeks in length and includes both Routine Serology and Hepatitis testing. The Clinical Immunology Lab is located at The Miriam Hospital. Students will be required to rotate through the Immunology Lab at The Miriam Hospital (AMC Laboratories)

The first is a series of BRISAH lectures covering basic concepts used in Immunology and Serology, such as definitions of antigen and antibody, development of antibodies and the immune response, the roles of T and B lymphocytes in the immune response, the types and properties of antibodies, and reactions of these antibodies during acute and convalescent stages of disease. The different types of reactions used in the Serology Laboratory to detect antigen or antibody are also discussed.

The second portion includes the laboratory rotation. The student will be introduced to routine serologic testing methods used in the Clinical Immunology Laboratory. These methods include; agglutination reactions, ELISA/EIA testing, neutralization, nephelometry and indirect immunofluorescence. Serologic testing is used for the diagnosis of Syphilis, Autoimmune Diseases, and Lyme's Disease. Testing for detection of infectious viral agents include; Varicella, Rubella, Hepatitis and HIV. Students will learn how tumor markers and cardiac markers are used in diagnosis of disease. Students will also learn the concepts of electrophoresis and its application to protein and immunoglobulin separation. Students will learn to operate a variety of instruments and observe immunologic studies using fluorescent microscopy.

Molecular Biology Laboratory (2 weeks). This laboratory performs tests on DNA and RNA. Students will learn to extract DNA from specimens and be introduced to molecular techniques used in diagnostic testing. Students will learn to perform PCR - Polymerase Chain Reaction Test that amplify and detect isolated target DNA. PCR testing is used to identify infectious agents (viruses, bacteria, and other microbial agents), specific human gene mutations (Factor V Leiden), oncogene mutations, and genetic sequencing.

Main Biochemistry Laboratory (6 weeks). This rotation performs all of the routine chemical analyses. The large menu and volume of testing in this area has led to very advanced automated systems. Students receive instruction to operate the large chemistry analyzers to include the lab information system as well. A variety of testing methods are used in the Chemistry Laboratory including: enzymatic and colorimetric analyses, chemiluminescence, HPLC and ion-specific electrodes.

During the laboratory rotation, students will be introduced to a quality control program that reviews such topics as standard deviation as well as co-efficient of variation. They will learn to operate the Beckman AU analyzers, have an exposure to Remisol and the laboratory information system Soft. Students will also interpret data and observe how to result routine, critical and STAT test. Further, the student learns other testing areas that address topics such as A1C, cardiac markers, blood gases and lipid profiles.

A portion of the time spent in the Main Chemistry rotation is shared with the Core Lab at The Miriam Hospital. This site offers an opportunity to work with a very progressive, fully automated, robotic laboratory. The time spent here further specializes in a variety of endocrine testing that is unique to this site for all Lifespan partners. Both chemistry laboratory instructors work in tandem to round out a comprehensive chemistry lab experience.

Toxicology Laboratory (1 week). Primarily involved with tests for drug analysis. Here, the student is exposed to extraction procedures and to the instrumentation (gas chromatography, UV spectrophotometer, IR spectrophotometer, and mass spectrophotometer) used in this work.

Phlebotomy (1 day with option of elective week) During this one day workshop, each student spends one full day in a training with two members of the blood drawing team. A basic introduction to patient approach and blood drawing techniques are presented at this time. When this person feels that the student is ready, the student is permitted to draw their classmates. If the student elects to spend more time concentrating on phlebotomy techniques, there will be an opportunity to draw patients. This is done on a strict voluntary basis for the student's own enrichment.

Capstone Project Students will be required to complete a Capstone project and present a poster session at the ASCLS-CNE Spring Meeting in May. This self-study assignment is part of the Professional Topics Course offered in the clinical internship program. Students will be introduced to basic research theories, develop a proposal for presentation, use library, reference and internet to research information, develop a poster presentation for a professional meeting/seminar, complete a written paper for review and evaluation and create a presentation to be given to their classmates.

Elective Weeks Students are assigned four elective weeks during their Spring Semester. During these four weeks, one must be spent doing an extra experience. Examples of extra experiences include spending time in a phlebotomy area, spending additional, concentrated time in an area of interest, having an exposure to the Rhode Island Department of Health laboratories, etc. The remaining three weeks the student is encouraged to work on their Capstone Project. Students are required to spend four hours a day on campus to work on their project during these times.

Review Session. The last two weeks of the clinical year are spent reviewing material learned during the year. The major purpose for these sessions is to help the students correlate information from various laboratories into a unit. Extensive use of review exams, review games, and mandatory in-classroom studying is required during this time. These two weeks provide a mechanism to prepare for the year end comprehensive exam and board of certification exam by intensely reviewing each subject using multiple methods.

**RHODE ISLAND HOSPITAL
SCHOOL OF MEDICAL TECHNOLOGY**

ACADEMIC STANDARDS

A. Evaluation System

Evaluation takes a variety of forms depending, in part, on the situation within a particular laboratory. Basically, evaluations include written, practical, and/or oral examinations and written performance evaluations for all students by their instructors and for all laboratories and instructors by the students. All forms of evaluation are clearly described and presented to the student in the student Handbook at the beginning of the year.

B. Laboratory Examinations - Laboratory Examinations are provided under the following conditions:

1. All major examinations for every rotation are given by the Program Director at the school facility during regular school hours.
2. Students are required to take final examinations **NO** later than 7 days after completion of each rotation.
3. All laboratory practical examinations, quizzes, review examinations, unknowns, etc., provided in the laboratory must be completed before the student may take the final examination for that rotation.
4. Students must notify the Program Director/Secretary that they will be taking an exam at least 48 hours prior to that date.
5. Students will report to the School Classroom for all examinations. Completed examinations must be returned to the Program Director/Secretary in the School Office.
6. Students who do not take a final exam within the seven-day period will receive a zero (F) for that examination. No make-up examination will be provided for students failing to meet established exam deadlines.

C. Grading - A mark of less than **75% is **NOT** acceptable for a laboratory examination. If the grade is less than 75%, 1 week (7 days) is given for review and the student may then take the make-up exam. However, if the mark of the second exam is still less than 75%, the grade is recorded and the student is placed on academic probation.**

D. Lecture Examinations

1. All BRISAH Examinations are scheduled on Mondays from 8:30-10:30 A.M. A schedule of lecture and examination dates is provided to each student prior to the beginning of the series.
2. Students absent for an examination on Monday due to illness must take the exam the day after they return to the hospital, from the grade secured on this exam.
3. Students who do not take the lecture exam within the time frame established will receive a zero (F) for that examination.
4. Grading - The passing grade for lecture exams is 70%. Students receiving less than a 70% average for any two-lecture sections will be placed on academic probation.

E. Evaluation Interview

Periodically, during the year, the student has an evaluation interview with the Program Director. At these sessions, the student's performance evaluations are reviewed and discussed. The student is given a chance to reply to what is written--be it positive or negative. Positive performance is praised and encouraged; negative performance is examined for the course of action, which will lead to correction of the problem. A summary of the interview is written by the Program Director and is placed in the student's file.

F. Grading Policies

Both a letter and number grade are used when reporting grades to the College Registrar's Office. The system used is as follows:

A+ (97-100)	B+ (87-89)	C+ (77-79)	F (less than 70)
A (93-96)	B (83-86)	C (73-76)	
A- (90-92)	B- (80-82)	C- (70-72)	

G. Comprehensive Exam

A comprehensive exam for the clinical year will be required prior to graduation date. Grading for the comprehensive exam will be on a pass/fail basis. Students must attain a minimum score of 60% for successful completion of the program. Students failing the comprehensive exam will be given additional study time and an opportunity to take one comprehensive make-up exam. Students must achieve a passing grade of 60% or better on the make-up exam in order to fulfill graduation requirements.

H. Academic Probation

Students are placed on academic probation under the following conditions:

1. Failure to earn a mark greater than 75% following second laboratory make-up exam.
2. Marks less than 75% for any two laboratory exams.
3. Averages less than 70% for any two lectures sections.

In the event that a person should be placed on academic probation, both the student and College/University Coordinator shall be notified in writing.

I. Termination from the Hospital Program.

Students may be asked to return to the college campus or terminated if:

1. Averages greater than 70% are not maintained for all rotations (laboratory and lecture).
2. Marks for more than two laboratory rotations are less than 75%.
3. Averages for more than two lecture sections are less than 70%.
4. Required attendance is not maintained for either laboratory or lecture sections.
5. Any flagrant violations of the school or hospital policies are noted.
6. Repeated actions not considered characteristic of a professional person are noted.
(See Section: **Objectives: Affective Domain.**)

J. Grievance Procedure

1. In general, violations of any of the items listed under Affective Domain (pages 3 and 4) shall be handled within the individual hospital. Most of the problems or criticisms will be handled through informal discussions between the student and the Program Director (or designee), and/or laboratory supervisor.
2. Problems not resolved by meetings in Step 1 are referred to the College Coordinator. Informal discussions between the student, College Coordinator (or designee), and/or the Program Director may take place at this time.
3. For severe violations, or when the Program Director (laboratory supervisor), College Coordinator, and student cannot come to agreement during informal meetings, a more formal grievance procedure may be used.

Step 1. The student shall submit in writing a description of the grievance within three school days of notification of penalty.

Step 2. A formal meeting between the student, Medical Director, Laboratory Manager where infraction occurred, and Program Director shall be scheduled within five school days of receipt of the written problem. Minutes shall be kept of this meeting. The conclusion of this body shall be submitted in writing to the aforementioned parties involved.

Step 3. If the conclusions reached at this meeting are not satisfactory, or if violations of 3 and 16 (See Affective Domain, pages 3 and 4) are reported, the student may petition the BRISAH Grievance Committee within 10 school days following the meeting described in Step 2. The Grievance Committee consists of:

- a. Three individuals named by the student. These individuals must be at least supervisory-level personnel or members of the school faculty. Selection is made from persons not connected with the college or hospital directly involved with the infraction. Students may select faculty from another School of Medical Technology or college/university in the BRISAH Consortium
- b. A representative from the Hospital Human Resource Department.
- c. A representative from the Hospital Administration.
- d. These individuals should meet the approval of the student and the program officials identified in Step 1.
- e. The Grievance Committee shall elect one of its members to serve as Chairperson.

This committee shall request written and/or oral testimony from all involved parties. The decision of this body shall be made within 10 school days of receipt of the formal grievance. The decision shall be in writing, and will be considered final and binding for all.

4. Violations of items 3 and 16 in the Affective Domain (e.g., cheating, drinking, and stealing) are grounds for immediate dismissal from the hospital and are described in these terms by the Hospital Personnel Policies Handbook.

If report of any such violation is made, the Program Director shall notify the College Coordinator. The student's dismissal shall be made official through a written statement signed by both these individuals. Should the student question the action, a formal grievance may be filed within three school days of the decision.

5. Should the student be found in violation of any provision of this statement, the action dictated by the committee(s) may take a variety of forms ranging from a written warning to dismissal from the hospital program. The Program Director or Medical Director reserves the right of immediate suspension if such an action is in the best interest of the patient and hospital.

K. Contingency Plan

Based on the current content guidelines published by ASCP pertaining to MLS programmatic content and assessment of student mastery, the School of Medical Technology at Rhode Island Hospital can provide a complete laboratory experience. However, should a catastrophic event occur which would render the building unable to be used by students, the Program Director would contact the local hospitals in Rhode Island to place students in to complete their clinical experience. Rhode Island has three other hospital systems as well as a stand-alone hospital in the southern part of the state closest to the university affiliate, University of Rhode Island. Each system performs a series of laboratory tests with comparable instrumentation allowing the students of Rhode Island Hospital to receive a comparable experience. Should these hospitals in Rhode Island be unable to take in all the students, the city of Boston, Massachusetts is within a travelable distance for students to get to daily. Boston and the greater metropolitan area have close to 24 hospitals that would be possible clinical sites.

L. Retention of Student Records

The student's application materials, health records, references, transcripts, interview summaries, evaluations, attendance records, grade reports, counseling forms, exams, and achievements are kept in locked files in the Program Director's office. Students may request to review any part of their file except those areas restricted by signed waiver, such as references. Release of information is prohibited without written consent of the student.

Official student records are maintained permanently by the Program Director in locked files. Student files contain a minimum of:

1. a completed application form
2. a copy of the official college transcript
3. signed evaluations from each of the laboratory departments
4. grade forms
5. and signed summaries of any specific counseling and/or advisement.

Once a student has successfully passed the ASCP Board of Certification exam, all exams taken during the clinical year are destroyed. The student is considered to no longer need the information available in those exams.

Definitions:

- a) Enrolled student is a person who is currently participating in the BRISAH didactic program and rotating thru the clinical laboratory sections.
- b) Graduated student is a person who has successfully completed the clinical internship by academically qualifying to receive a certificate from the Program.

RHODE ISLAND HOSPITAL SCHOOL OF MEDICAL TECHNOLOGY PROFESSIONAL POLICIES

INTRODUCTION

Professional behavior is expected of students at all times. Disciplinary measures will be exercised in accordance with the disciplinary policies of Rhode Island Hospital. The School of Medical Technology is part of Rhode Island Hospital, and therefore assumes many of the same policies as the hospital.

Rhode Island Hospital and its Lifespan partners are organizations where the people must work together and employees and students are expected to conduct themselves in a manner that will insure the provision of quality health care to patients, a satisfying working relationship for each individual, and respect for the dignity, rights and property of others.

Employees and students are expected to understand the policies and regulations relating to their performance and behavior. When the conduct of an employee or student affects the efficient operation of the hospital, or violates the rights of others, corrective action will be taken to provide an opportunity for the employee or student to change his/her conduct.

All students are required to read these policies. There will be an opportunity to ask questions about these policies. Each student is required to sign a statement acknowledging the fact that they have received a copy of the policies and that they understand the School of Medical Technology's interpretation of these policies.

The following general policies are applicable the student laboratory and clinical rotation phases of the programs. During clinical rotation the student is expected to consult with their instructor for the policies utilized in their specific divisions. Infraction of any of these policies will be reflected on the Student Performance Evaluation.

A. INTEGRITY

1. Honesty:

The most important trait that a Medical Technologist or Clinical Laboratory Scientist must exemplify is HONESTY. Any task, either cognitive or psychomotor, must be carried out with the highest degree of integrity. Complete, accurate, valid reports are vital in every facet of laboratory work and patient care.

Examples of infractions of honesty include:

- a. Negligence related to patient care.
- b. Falsification of any documentation contained in a patient's medical record.
- c. Falsification of academic material.
- d. Falsification of test results from procedures performed in student laboratory.

Actions taken in regard to infractions of integrity will be determined by the Clinical Instructors, College/University Coordinator, and Program Officials and could result in suspension or dismissal.

2. Cheating:

CHEATING OF ANY KIND MAY RESULT IN IMMEDIATE DISMISSAL

If cheating occurs, the student is not only cheating on the academics or laboratory work, but is cheating himself/herself of the knowledge and skills required to be a competent Medical Technologist / Clinical Laboratory Scientist. This policy includes all work performed, including exams, quizzes, worksheets, laboratory tests, case histories, projects, etc. Any violation of this policy may result in dismissal from the program.

3. Confidential Information:

A Medical Technologist/Clinical Laboratory Scientist has the moral, ethical, and legal responsibility to insure the confidentiality of patient information. This means that discussion of patient information will only involve authorized personnel, at the appropriate time, and in a private place. All information should be discussed in a professional manner. Be particularly careful not to discuss patients in elevators, halls, the cafeteria or other public places where patients, relatives, visitors and other hospital employees may overhear the conversation.

Examples of infractions of confidentiality include:

1. Unauthorized possession of confidential records or unauthorized use of hospital information systems.
2. Disclosure of information contained in confidential records including all lab reports and medical records.

B. CONDUCT

1. General conduct:

Students are expected to demonstrate responsible professional behavior at all times. Students must be aware and recognize that their courses are being conducted in the professional environment of a hospital. Nonprofessional conduct such as rudeness, excessive noise, throwing items, verbal or physical fighting, etc. is totally inappropriate and subject to disciplinary measures up to and including suspension or dismissal.

Examples of infractions of conduct include:

1. Reporting to work under the influence or using any intoxicant and/or illicit drugs.
2. Possession of firearms, fireworks, dangerous weapons, alcohol and/or illicit drugs.
3. Refusal to accept and/or perform a reasonable work assignment.
4. Insubordination.
5. Violation of safety rules and practices.
6. Use of abusive, vulgar or threatening language.
7. Nonprofessional conduct.
8. Interfering with the work of other employees/students.
9. Acceptance of gratuities.
10. Unauthorized solicitation.

2. Interaction with Patients:

Every patient is an important person in the hospital. Patients depend upon clinical laboratory scientists and technicians to provide care in a professional manner. The patient is not an outsider or an interruption to our work. The patient is our work and, in turn, our professional behavior is judged by the patient. A patient or visitor usually forms his opinion of the hospital through their contact with various individuals. If a Medical Technologist or other hospital employee is rude, tactless, unfriendly, or inefficient, it will take a great deal of kindness and efficiency to overcome this bad impression. Remember, a person forms an opinion of an individual within the first few minutes of an encounter. Make a good impression.

The Technologist's primary patient contact is in the role of phlebotomist. The following guidelines should be observed:

1. When meeting a patient, greet the patient courteously, using their name; identify yourself, and state your purpose for being there. Be tactful. Patients are frequently sensitive, irritable, confused and often frightened at the prospect of a venipuncture or other phlebotomy procedure.
2. If a patient refuses to have their blood drawn, **DO NOT** argue with the patient. Inform the nurse in charge, and document this information.
3. Do not discuss the patient's illness with the patient. If you are asked about the tests that you are collecting and their meaning, advise the patient to discuss this with their physician or primary health care provider.
4. Never give the patient anything to eat or drink without first receiving permission from a nurse or other health care provider.
5. Do not visit or assist patients in any matters not directly pertaining to the collection of specimens during working hours.

3. Interaction with Visitors:

- a. Be courteous. Ask visitors to leave the room while you are collecting blood specimens. When dealing with pediatric patients, parents may be helpful. If an individual refuses to leave the room, consult the nursing staff.
- b. If family members or friends inquire about the procedures, which you are performing, direct them to the patient's physician, nurse or other health care provider.

4. Interaction with Professional Personnel:

- a. It is important to demonstrate proper respect and conduct when dealing with all health care professionals and other hospital employees, in person and on the telephone.

- b. It is important to demonstrate proper respect and courtesy to instructors and guest lecturers. These individuals will help you gain information and insight about the profession.
- c. It is important to demonstrate proper respect and conduct to laboratory managers, supervisors, technologists and technicians on clinical rotations and phlebotomy rounds.
- d. Do not allow yourself to be drawn into an argument, particularly in the presence of patients and/or visitors! If differences of opinion arise, advise individuals to discuss the matter privately with supervisory personnel, if necessary.
- e. Do not agree to do anything you do not know how to do or are not authorized to do. If you are questioned about laboratory requests, advise the individual to consult the specific laboratory division.

5. Interaction with Classmates:

- a. Professional behavior is expected of all students whether they are in the student laboratory or the clinical lab setting.
- b. Courtesy, respect, and patience are important qualities when interacting with classmates.

C. APPEARANCE

1. General Appearance:

Students in the School of Medical Technology are expected to follow a dress code standard similar to the standard established by Rhode Island Hospital and Lifespan. The dress code and other standards are designed to create and maintain the safety and professional image of health care providers, in general, and laboratorians, in particular. Each of us contributes to our professional commitment by our own personal behavior; each of us is a role model for others.

The patient is the central focus of this institution. Patients, visitors, and other health care professionals develop perceptions of Rhode Island and its Lifespan partners based on their encounters with laboratory personnel and they often relate appearance with professional capability.

Studies show that impressions are frequently made in the first sixty seconds of an encounter, even before a word is spoken, through physical appearance, body language, and personal etiquette. These are powerful non-verbal communication tools that quickly convey a definite message to others. An appropriate personal image strengthens professional potential and inspires confidence.

In support of this concept, the School of Medical Technology has developed these policies to assure that students present a professional appearance, appropriate to a health care service setting, while maintaining safety, comfort and individuality of the employee. When it comes to dress, common sense is the key. Please keep in mind that what is fashionable or appropriate in other settings may not be suitable for working hours in a hospital. A neat, modest, conservative appearance is essential to maintain professional standards.

Enforcement of the dress code is the responsibility of the clinical instructors and program officials.

2. Dress Code Standards:

This is a clinical internship program provided by the hospital not a college course provided on campus. Students enrolled in the program must adhere to the dress code that is established respective hospital. Students should maintain a professional appearance whether in class or in the laboratory setting. All students will be required to wear a standard uniform while enrolled in the program.

- a. A clean white long sleeve laboratory coat with a closed front
- b. Khaki pants or skirt and a dark blue polo shirt with school insignia (short or long sleeve)
 1. dress pants must be ankle length but not touch the floor (No cargo pants or logos)
 2. the length of the skirt cannot be more than the four inches from the top of the knee.
 3. short sleeve white tee shirts may be worn under the polo shirt
- c. Shoes must be clean and polished. Closed –toed shoes must be worn. Heels and/or soles must be less than two inches. Leather or nonporous sneakers may be worn provided they are all black or white.
- d. During the winter months a white or teal sweater may be worn over the polo shirt.
- e. Additional rules regarding dress/lab coats and protective gear will apply when students are in laboratory rotations

3. Grooming:

- a. Hair must be clean, neat, and well groomed. If hair is long it must be tied back off the face.
- b. Males: Faces must be freshly shaven, or beard and/or mustache must be clean, neat, trimmed, and well groomed.
- c. Fingernails must be well groomed and not excessively long.
- d. Cosmetics and jewelry may be worn in moderation. No more than three earrings per ear are permitted. No jewelry may be worn in other visible pierced body sites (e.g. tongue, eyebrow, etc.)

4. Specific Restrictions:

- a. Clothing: Torn, faded, wrinkled, or tight clothing of any type is unacceptable. Lab coats may NOT be worn over inappropriate clothing.
- b. Blue jeans, cargo pants, capri pants, sweat shirts or sweat pants, tank tops, tee-shirts with logos or advertisements, midriff or halter tops, and cut off shorts are NOT acceptable.

- c. Hiking or work boots are NOT acceptable. High top Sneakers are only acceptable when worn with pants.
- d. No hats or caps of any type may be worn, except for religious reasons.
- e. Long or dangling jewelry must not be worn for safety reasons

Enforcement of dress code: program officials, faculty, instructors or lab managers can enforce the dress code. Students are expected to maintain a professional appearance at all times. Failure to conform to the dress code may result in the student being sent home to change into appropriate attire. A verbal warning will be given to the student with documentation on the Student Performance Evaluation Form. Repeat offenses of the dress code policy will result in written warnings and disciplinary action up to and including dismissal from the program.

The criteria for disciplinary action for failure to conform to the dress code policy are as follows:

INFRACTION	ACTION
1) First infraction	Verbal warning
2) Second infraction	Written warning
3) Third infraction	Dismissal

D. IDENTIFICATION:

All students are required to wear a Hospital Identification Badge during scheduled days at the hospital. These will be provided to students during the orientation. During both lecture and laboratory rotations, all students are directly responsible to the Program Director. Any misconduct or violation of hospital policy will be reported to the Program Director for disciplinary action. Students will observe all hospital rules/policies while in attendance at RIH.

E. ATTENDANCE:

Attendance is an extremely important consideration when evaluating personnel for careers in healthcare and when assessing overall performance for the purpose of hiring and performance evaluations.

ATTENDANCE IS MANDATORY FOR ALL LECTURES AND CLINICAL LABORATORY ROTATIONS.

1. **Time sheets** - The student must be on time for all scheduled classes and laboratory rotations. Students are required to complete a time sheet indicating in and out times for that day of the month. Time sheets are signed and submitted to the Program Director at the end of each month.
2. **Sign-in Sheets for Lecture** - The student must sign in on each lecture day. If the student is late, he/she must indicate the reason on the sign-in sheet.

3. **Time tracking sheets** - The student is required to have the Time tracking sheet signed by the instructor at the end of each day of laboratory rotations. These should indicate the time spent on instruction with the student as well as laboratory practice time. The forms will be collected each week during the Mandatory Wednesday Class Meeting.

1. **Absenteeism / Tardiness:**

Dependability and reliability are important characteristics of laboratorians. Attendance is an important factor reflecting individual dependability and reliability. Students are expected to be present and on time for all classes, examinations, clinical rotations, class meetings, and other assignments. Failure to meet attendance goals will be reflected in the Student Performance Evaluation under Dependability /Attendance. Students who fail to meet the established goals for attendance will be placed on probation. This may lead to further disciplinary action including dismissal from the program.

If the student is going to be late or absent for any reason, He/she **MUST**

1. Contact the Program Director at 401-444-5724, beeper 401-350-5974 before 8:00AM. If no one is available to answer your call directly, leave a voice mail message.
2. During clinical rotations, notify the laboratory before 8:00AM or 15 minutes before the rotation are scheduled to begin. Specific laboratory telephone numbers and the names of Clinical Coordinators are provided in the student handbook.
3. **Tardiness** is defined as being **more than five minutes late**.
4. **Absenteeism** will be counted with sick days. Only 5 sick days are permitted each year.

The criteria for disciplinary action for excessive tardiness are as follows:

INFRACTION	ACTION
1) > 1 time/week or > 3 times/4 weeks	Verbal warning
2) Second infraction	Written warning
3) Third infraction	Dismissal

Meeting the attendance goal will result in removal from probationary status.

Entry into the cycle of disciplinary action for tardiness more than twice will result in dismissal from the program.

Absence from lecture is considered an absence from the Program. Students who are absent are responsible for obtaining any notes, handouts, etc. from that lecture. Students with frequent absences from lecture will be required to submit referenced responses in writing to all objectives for missed material. Grades for the corresponding examination will be considered incomplete until the assignment is complete.

If a Lecture Exam is missed, the student is required to take the exam on the first day returning to the hospital. Ten points will be deducted from the second missed exam and will be cumulative for each subsequent absence. Students arriving late (>20 min.) for the examination will not be allowed to sit for the exam. This will be considered a missed examination.

2. **Personal Days:**

- a. **THREE** personal days are allowed during the year. A personal day is defined as a day off chosen by the student and approved by the instructor and Program Director. This time is reserved for family emergencies, school or job interviews, or other important personal appointments. Approval is based on consideration of the scheduled classes and clinical responsibilities. The student must complete the Personal Day Request form, have it signed by the instructor and submitted for approval at least one day in advance.
- b. The Program Director may assign the use of personal time in the event of extenuating circumstance such as car trouble, inclement weather, etc.
- c. Students must make every effort to schedule medical doctor and dentist appointments after class or laboratory hours.
- d. In case of medical or family emergency where advance notice is not possible, students are still expected to notify the student lab and laboratory division as described above.

3. **Sick Days :**

FIVE sick occurrences are allowed during the year. An absence of three or more consecutive days requires a note from your personal physician or Employee Health Services upon your return. Any missed work will be made up at the discretion of the instructor(s) involved. This time may be during scheduled vacations or at the end of the clinical rotation. If the student will be absent due to illness, the student must:

- a. Contact the Program Director at 401-444-5724, beeper 401-350-5974 before 8:00AM. If no one is available to answer your call directly, leave a voice mail message.
- b. During clinical rotations, notify the laboratory before 8:00AM or 15 minutes before the rotation is scheduled to begin. Specific laboratory telephone numbers and the names of Clinical Coordinators are provided in the Student Handbook.

4. Snow Days and Cancellations:

Rhode Island Hospital must maintain adequate staffing at all times, regardless of conditions. Employees are expected to report to work, on time, regardless of weather conditions. If a local emergency is declared due to severe weather, students are expected to report to the student or clinical laboratory after weather conditions have improved enough to allow safe travel. The student should use good judgement regarding safe travel to and from the hospital. The School of Medical Technology is an academic program supported by Rhode Island Hospital. General rules of attendance for school during storms in comparable institutions (i.e., colleges, universities, etc.) should apply. If the student is unable to attend school, the student must notify the Program Director and clinical instructor of his/her assigned laboratory. In addition it is the responsibility of the student to make up any work or practical experience missed during such an absence to the specifications of the clinical instructor of the assigned laboratory. Lectures will be canceled for inclement weather or other reasons by the Program Director. Students will be called in advance of the cancellation, if possible. Students should call the Program Directors (at home) if there is any question of cancellation of classes that day.

5. Vacations and Holidays:

Students are not required to attend clinical and/or lecture for all hospital recognized holidays. Students are also given a two week winter break which occurs the end of December/beginning of January.

F. POLICY FOR STUDENT WORK

It is the policy of the School of Medical Technology that students are not expected to perform service work in the laboratory during their educational studies. At no time will students be used to replace technologists at the bench. All student work must be voluntary and non-compulsory. When students are learning or performing procedures, they will be under direct supervision of a technologist or instructor.

Student Employment - A number of job opportunities are available to the student. It is understood by the student that he/she may accept a position here at the hospital only under the following conditions:

1. Previous to taking the job, the student must have demonstrated at least a "B" average.
2. The student may not work **MORE THAN** 20 hours per week. If 20 hours are worked regularly, the student will be eligible for benefits (based on hours employed) after three months. Falling below 20 hours per week would terminate the benefits.
3. In the event that the student's average becomes less than "B", the Program Director may require termination of employment within two weeks after notice to the student and laboratory involved.
4. Due to the rigors of the clinical year, it is required that students who have non-hospital related jobs also keep their hours less than 20 per week.

G. TUITION – AFFILIATED STUDENTS

No tuition is charged directly to students from affiliated colleges or universities by the School of Medical Technology. Students presently enrolled in one of the affiliated colleges are required to follow that institution's policy regarding payment of tuition and/or fees. The Hospital is reimbursed the tuition for the students enrolled in the program directly from the affiliated colleges

H. TUITION – NON-AFFILIATED STUDENTS

Students from other programs or graduates with a B.S. degree may be placed in the program should there be a vacancy. These students are charged a fee of \$6,000.00 directly by the school. The tuition fee is billed in two payments by semester.

I. STUDENT COUNSELING

There is no organized counseling center primarily concerned with the problems of students located here at the hospital. Most of the counseling and the screening and handling of complaints and grievances are taken care of initially by the Medical Director. If this type of informal discussion cannot solve the problem, it may then be referred to the College Coordinator, the Medical Director, or the Employee Relations Counselor here at the hospital.

J. JOB PLACEMENT

There is no formal job placement service at Rhode Island Hospital. Basically, it is the student's responsibility to find employment following graduation. In an informal way, the hospital employment office and the Program Director offer as much help as possible to the student. All communications sent to the Program Director concerning job opportunities are brought to the attention of the student; and one of the seminar sessions is concerned with the writing of job resumes and general discussion of the problems the student might encounter when searching for a job.

K. MALPRACTICE INSURANCE

All students must have some form of malpractice insurance. If such coverage is not provided by the college or university, the student must purchase a policy. Further information may be obtained by contacting the Program Director for the School of Medical Technology Program at Rhode Island Hospital.

L. NO SMOKING

Rhode Island Hospital is a Smoke Free Facility. Students are required to observe the Hospital No Smoking Policy, which prohibits smoking throughout the facility and grounds. Smoking is only permitted in 2 designated areas.

M. PARKING

Students will park in the designated RIH employee parking lots. Students will be assigned parking in Lots E-7. Students should allow adequate time to arrive and park when attending lectures or laboratory rotations. The student's ID badge will be required to enter employee parking lots. All students will receive RIH Parking Stickers that are required for vehicles parked in employee lots. Shuttle service is provided to parking lots from the APC Building.

N. TRAVEL

For students who require a car to get to and from the school, the hospital is conveniently located off Route 95 at Exit 18 N or 19 S. Parking facilities for over 5,000 cars are available at no cost. A shuttle service is available from hospital parking lots with convenient service to the major buildings on campus. For those who find it necessary to use the bus, the hospital is located on the Eddy Street bus line from downtown Providence and students may be picked up and let off at the Main Lobby of the hospital.

Students will be required to travel to other hospitals within the Lifespan Academic Medical Center (The Miriam Hospital) as part of planned experiences for clinical rotations.

O. HEALTH SERVICES

All students are required to have a physical exam and have a Health Record Form completed by a physician prior to enrollment. This form will include hospital requirements for proof of vaccination and immunization status. These records are reviewed by the Medical Director and are maintained by the school for the year of training. In the event that there is a problem with the student's health status or related handicap, the Hospital's Risk Management Department will be consulted to advise and support the acceptance or rejection of the student applicant. The Hospital's Personnel Health Clinic does not assume responsibility for the health of the student. An illness or injury incurred by a student during school hours is handled either by the Emergency Room or by the student's personal physician.

P. HEALTH INSURANCE

All students must have some form of health and accident coverage. Proof of insurance must be provided to the Program Director during admission. Failure to be covered may result in dismissal from the program.

Q. ACCIDENTS

All accidents, which may occur anywhere on hospital grounds, should be reported immediately to the manager of the laboratory where the accident took place or to the Program Director. This person will then see that the proper procedure concerning the reporting of accidents is followed. Students should be prepared to complete a hospital incident report if required

R. SEXUAL HARASSMENT POLICY

It is the policy of the School of Medical Technology and Rhode Island Hospital to assure its students and employees of the right to work in an atmosphere of security and dignity, free from sexual harassment. Sexual harassment is a violation of Hospital Policy and is defined as follows:

Sexual Harassment is any unwelcome sexual advance or requests for sexual favors or any conduct of sexual nature when

(1) Submission of such conduct is made either explicitly or implicitly, a term or condition of an individual's employment or admission.

- (2) Submission to or rejection of such conduct by an individual is used as the basis for employment or academic decisions affecting such individual, or
- (3) Such conduct has the purpose or effect of substantially interfering with an individual's work performance or creating an intimidating, hostile or offensive working or academic environment.

Students or employees who encounter such abuses from faculty, supervisors, fellow students or employees, physicians, employees of outside vendors and contractors, visitors, or patients should contact the Program Director or a representative of the Human Resource Department. Complaints will be dealt with according to the guidelines set forth in the Rhode Island Administrative Procedures. Complaint investigations will be held in the strictest confidence and no reference to the complaint will be placed in the complainant's personnel or student file.

S. BOOKS

Students are also required to buy textbooks. This list is reviewed annually and is subject to change. The average cost of books for the clinical year is \$900.00. It is the responsibility of the student to see that the required texts are purchased prior to the starting date.

T. WITHDRAWAL POLICY

Students who choose to withdraw from the program must submit their decision in writing to the Program Director and Medical Director. All fees, once submitted to the school, are non-refundable.

Any student from an affiliated college/university who withdraws from the program is subject to the rules and regulations of their college concerning failure to complete coursework and withdrawal from the college. The College Coordinator will be notified by the Program Director that the student is withdrawing from the School of Medical Technology. Students may be referred for counseling at this time should it be required.

U. REFUND POLICY

Should a student not finish a clinical year of training, no refund of any portion of monies spent for fees, uniforms, or books will be made by Rhode Island Hospital.

Affiliated students - Refund of tuition paid to the colleges is the province of the degree-granting institution. Students must follow the refund policies established for the college. These policies should be explained in that particular college catalog.

Non Affiliated Students - No portion of tuition paid directly to the school will be refunded if a non-affiliated student withdraws or is unable to complete the program.

V. FINANCIAL AID

Scholarships are not granted directly by the School of Medical Technology or by Rhode Island Hospital. The program is approved by the VA and those who are eligible for these funds may obtain further information by contacting their local Veterans Administration

Office. The school is approved by the R.I. Higher Education Assistance Authority as a fully accredited training program.

Students receiving financial aid from the college will continue to qualify for aid while completing their senior year at the hospital. All affiliated students should handle all financial aid matters through the financial aid office at their respective college.

Students with degrees may qualify for educational loans provided by local banks and lending institutions for the clinical year. Students should seek out these sources on an individual basis depending on financial resources and need. Students with their B.S. or B.A. may also defer loan payments while enrolled in the hospital program. The appropriate school official must provide verification of student enrollment for deferment. This applies to most Federally Administered Programs such as Guaranteed Student Loan Program (GSL), Pell Grant Program, and other institutional programs provided by colleges and universities.

X. ROOM AND BOARD

The hospital makes no special provisions to students in the Medical Technology Program for room and board. In these instances, students are given the same opportunities as any other employee. For example, the student may purchase meals in the cafeteria at the same rate as employees.

Most students either live with their families or find apartments in the Providence area. Students who must look for apartments would probably find the listings in the Providence Journal to be of the greatest help.

FINAL NOTE:

The information found in this catalog shall be reviewed and updated at periodic intervals.

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 April, 1982
 February, 1983
 July, 1983
 June, 1984
 December, 1984
 January, 1986
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