# TABLE OF CONTENTS

MEDICAL LABORATORY SCIENCE PROFESSION ................................................................. 1

INTRODUCTION AND PHILOSOPHY ........................................................................... 1

MISSION STATEMENT ................................................................................................. 1

PROGRAM GOALS ...................................................................................................... 1

PROGRAM OBJECTIVES FOR THE COGNITIVE AND PSYCHOMOTOR DOMAINS ........... 2

PROGRAM OBJECTIVES ............................................................................................ 2

COMPETENCY STATEMENT ....................................................................................... 2

FACILITIES AND RESOURCES .................................................................................... 2

OUTCOME MEASURES ............................................................................................... 3

PROGRAM IN MEDICAL LABORATORY SCIENCE ....................................................... 3

AFFILIATED SCHOOLS ................................................................................................. 3

ADMISSION REQUIREMENTS ...................................................................................... 3

CRITERIA FOR STUDENTS WITH DATED COURSE WORK ......................................... 4

CREDIT FOR PREVIOUS LABORATORY EXPERIENCE ................................................. 4

MINIMUM TECHNICAL STANDARDS (Essential Functions) ......................................... 5

APPLICATION SELECTION AND ADMISSION PROCESS ............................................ 6

STUDENT EXPENSES AND LICENSING FEES AND REFUNDS ................................... 7

ORIENTATION ............................................................................................................. 9

STUDENT BENEFITS .................................................................................................. 9

SERVICE WORK AND PART-TIME EMPLOYMENT ..................................................... 10

STUDENT RECORDS ................................................................................................. 10

PERSONNEL ISSUES ................................................................................................. 11

    Time Off and Holidays ......................................................................................... 11

    Attendance ........................................................................................................... 11

    Call Outs ............................................................................................................ 11

    Unexcused Absences ......................................................................................... 12

    Tardiness ............................................................................................................ 12
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS (Continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrective Action Impact on Grades ................................................................. 12</td>
</tr>
<tr>
<td>Breaks and Lunches ............................................................................................... 12</td>
</tr>
<tr>
<td>Weekly Schedule .................................................................................................... 13</td>
</tr>
<tr>
<td>Dress Code ............................................................................................................. 13</td>
</tr>
<tr>
<td>Non-Discrimination Policy .................................................................................... 13</td>
</tr>
<tr>
<td>Professionalism ..................................................................................................... 13</td>
</tr>
<tr>
<td>Safety ..................................................................................................................... 13</td>
</tr>
<tr>
<td>Health Insurance Portability and Accountability Act .............................................. 13</td>
</tr>
<tr>
<td>Information Management ....................................................................................... 13</td>
</tr>
<tr>
<td>Incident Reporting ................................................................................................. 14</td>
</tr>
<tr>
<td>Reasons for Dismissal ........................................................................................... 14</td>
</tr>
<tr>
<td>Identification Badges ............................................................................................ 14</td>
</tr>
<tr>
<td>EVALUATIONS AND METHODS OF EVALUATION ..................................................... 14</td>
</tr>
<tr>
<td>PASS-FAIL CRITERIA ............................................................................................... 15</td>
</tr>
<tr>
<td>ACADEMIC DISHONESTY ....................................................................................... 15</td>
</tr>
<tr>
<td>STANDARD OF CONDUCT ...................................................................................... 16</td>
</tr>
<tr>
<td>FLORIDA STATUTE AND DISCIPLINARY ACTION .................................................... 16</td>
</tr>
<tr>
<td>OTHER CRITERIA FOR UNACCEPTABLE PERFORMANCE .......................................... 16</td>
</tr>
<tr>
<td>DISCIPLINARY ACTION/DISMISSAL ....................................................................... 17</td>
</tr>
<tr>
<td>APPEALS AND GRIEVANCES .................................................................................. 17</td>
</tr>
<tr>
<td>PROBATION AND SUSPENSION ............................................................................. 17</td>
</tr>
<tr>
<td>PROFESSIONAL MEMBERSHIPS ............................................................................ 17</td>
</tr>
<tr>
<td>GRADUATION AND ELIGIBILITY FOR EXAMINATION ............................................. 17</td>
</tr>
<tr>
<td>STATE LICENSURE ................................................................................................. 18</td>
</tr>
<tr>
<td>STUDENT WITHDRAWAL ......................................................................................... 18</td>
</tr>
<tr>
<td>TEACH OUT PLAN ................................................................................................... 18</td>
</tr>
<tr>
<td>EDUCATION LOANS AND SCHOLARSHIPS ............................................................ 18</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS (Continued)

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCREDITING AGENCY, STATE LICENSURE AND CERTIFICATION AGENCIES</td>
<td>19</td>
</tr>
<tr>
<td>PROGRAM OFFICIALS</td>
<td>20</td>
</tr>
<tr>
<td>School of Medical Laboratory Science Administration</td>
<td>20</td>
</tr>
<tr>
<td>Admissions Committee</td>
<td>20</td>
</tr>
<tr>
<td>Advisory Committee</td>
<td>20</td>
</tr>
<tr>
<td>Program Staff</td>
<td>22</td>
</tr>
<tr>
<td>FACULTY</td>
<td>23</td>
</tr>
<tr>
<td>UF HEALTH JACKSONVILLE CREDENTIALS</td>
<td>26</td>
</tr>
<tr>
<td>CURRICULUM AND COURSE DESCRIPTIONS</td>
<td>27</td>
</tr>
<tr>
<td>DIDACTIC AND CLINICAL CURRICULUM</td>
<td>29</td>
</tr>
<tr>
<td>COURSE OBJECTIVES</td>
<td>30</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>30</td>
</tr>
</tbody>
</table>
Enrolled students are team members of UF Health Jacksonville. Team members must abide by all hospital’s policies and procedures in addition to UF Health School of Medical Laboratory Science procedures. Students will attend Hospital Orientation in their first two day of the program.

**MEDICAL LABORATORY SCIENCE PROFESSION**
Medical Laboratory Science offers exciting possibilities for those who want a career in the medical field. Medical laboratory scientists are clinical scientists who perform complex analyses making use of hundreds of scientific procedures. They are able to recognize the interdependency of tests and have knowledge of physiological conditions affecting test results. They work with pathologists and other members of the healthcare team to help diagnose and treat disease. They must perform their duties with quality and patient safety in mind. Medical laboratory science is a challenging and rapidly changing field that offers opportunity for advancement in all areas of the healthcare field.

**INTRODUCTION AND PHILOSOPHY:**
UF Health Jacksonville is a private, not-for-profit hospital, affiliated with the University of Florida. UF Health Jacksonville is part of UF Health, the Southeast’s most comprehensive academic health center, with campuses in Jacksonville and Gainesville. The hospital’s origins date to 1870 as Florida’s first nonmilitary hospital and was known then as Duval Hospital and Asylum. UF Health Jacksonville is a leader in the education of health professionals, a hub for clinical research and a unique provider of high-quality patient care. Combining its strengths with the UF College of Medicine – Jacksonville, it offers residents in Northeast Florida and Southeast Georgia all the benefits of an academic health center. UF Health Jacksonville’s newest campus, UF Health North, which opened in 2015, includes a bed tower with 92 private rooms and a medical office building that houses an emergency room, outpatient surgery suites, imaging services and physician offices. It is the only full service hospital in North Jacksonville.

UF Health Jacksonville is an equal opportunity employer. UF Health will recruit, hire and train individuals without regard to race, religion, age, gender, national origin, marital status or status as a disabled veteran. The medical center employs and trains handicapped persons based on their ability to do the essential requirements of the job available and without consideration to their disability. These Equal Employment Opportunity standards apply equally to the applicants and students of the School of Medical Laboratory Science.

In keeping with the philosophy of UF Health Jacksonville, the School of Medical Laboratory Science affirms the importance of educational programs in the advancement of health care in both the prevention of disease and the promotion of health and believes in the benefits to patient health care delivery derived from ongoing educational programs.

**MISSION STATEMENT:**
It is the mission of UF Health Jacksonville School of Medical Laboratory Science to graduate competent and ethical medical laboratory scientists with entry-level skills, knowledge, and insight to excel in the practice of laboratory medicine and to pass national certification examinations. The Program’s goal is to foster the importance of professional development through lifelong learning, an atmosphere that promotes courteous and professional communication, provide the community with dedicated and highly skilled laboratory professionals, promote ethical behavior, and provide for future laboratory leaders and educators in a positive, non-discriminatory and supportive learning environment in its graduates.

**PROGRAM GOALS:**
At UF Health Jacksonville, we consider the past, study the present, and anticipate the future. The School of Medical Laboratory Science is committed to:

- equip our students with the education necessary to be part of a high-performance laboratory team that provides accurate and timely laboratory results to aide in the diagnosis and treatment of disease and maintenance of health
- provide students with the skills necessary to succeed in the medical laboratory and allied health field
- instill the practice of quality assurance and quality improvement in day to day laboratory performance
- provide an atmosphere that promotes courteous and professional communication between co-workers, students, patients and all members of the healthcare team
- encourage professional curiosity and instill the value of continuing education for growth and maintenance of professional competence
- provide our community with dedicated and highly skilled laboratory professionals
- promote ethical behavior as a foundation for leadership and education
- provide future supervisors, managers and educators in the health care professions
PROGRAM OBJECTIVES FOR THE COGNITIVE AND PSYCHOMOTOR DOMAINS:

Specific cognitive objectives and checklists for psychomotor skills for each rotation will be found in the Student Binder Materials. Specific objectives for each series of lectures will be provided.

PROGRAM OBJECTIVES:
During the course of the program,
The student will:
• adhere to and respect safety policies and procedures.
• adhere to and respect school, laboratory, and organizational policies and procedures.
• display a caring attitude by demonstrating promptness, dependability, attentiveness, perseverance, professionalism, good judgment, effective time-management, cooperation, respect, and maturity.
• relate well to other professionals and to patients.
• demonstrate professional oral and written communication skills.
• pursue opportunities to gain clinical and professional experience.
• demonstrate a desire to achieve objectives and internalize program goals.

The program will:
• define the competencies expected of graduates, scope and curriculum content of the program to ensure acceptable entry level skills of graduates.
• coordinate the educational process to meet NAACLS standards.
  NAACLS: National Accrediting Agency for Clinical Lab Sciences
  5600 N River Road, Suite 720
  Rosemont, IL 60018
  Telephone: (773) 714-8880
  www.naacs.org

COMPETENCY STATEMENT
The role of the Medical Laboratory Scientist is that of a broad-based health professional. Upon completion of the Medical Laboratory Science program, the student will have achieved career-entry competence in:
• specimen collection, processing, and handling.
• general laboratory operations including safety and management.
• effective use of computers and laboratory software.
• following policies and procedures.
• adhering to all laboratory safety rules and regulations.
• performing routine tests, quality control, and reporting results.
• performing the non-routine, more difficult and complex testing.
• interpreting, correlating, and analyzing test results.
• maintaining, troubleshooting, and problem-solving issues with instrumentation.
• monitoring testing procedures, equipment and professional/technical competency using Quality Assurance methodologies.
• providing an atmosphere that promotes courteous and professional communication with the patients, the public, and healthcare team.
• promoting ethical and professional behavior.
• processes of updating and validating new assays.
• continued professional development
• applying principles of educational methodology
• applying principles of management.

FACILITIES AND RESOURCES:
UF Health Jacksonville is a private not for profit full-service facility with 760 beds, 97 outpatient specialty clinics which also provides emergency and indigent care service to the community. The Clinical Laboratory performs over four million one hundred thousand test procedures per year. Therefore, the clinical resources serve as an excellent foundation for educational opportunities.
The School of Medical Laboratory Science is an integral part of the Hospital's clinical laboratories and includes a student classroom with a desk for each student, a separate student laboratory with space for each student, student library and Program Director's office. The classroom is equipped with microscopes including a teaching microscope and camera connected to a large monitor and up to date audio visual equipment.

The clinical laboratory is housed on the first floor of the clinical center and encompasses more than 30,300 square feet of well-designed space that is equipped with state-of-the-art materials, technology and instrumentation that is utilized during the student’s clinical experience.

OUTCOME MEASURES
As students graduate from the Program and take their licensing exams, the UF Health Jacksonville School of Medical Laboratory Science will post the following outcomes using the 3 most recent years of student data:

- Graduation Rate
- Board of Certification (BOC) Exam Pass Rate
- Average BOC Score
- National Average BOC Score
- Placement Rate

PROGRAM IN MEDICAL LABORATORY SCIENCE:
The School of Medical Laboratory Science offers a twelve (11.5) calendar month program for up to 6 students with a Bachelor’s degree in medical technology, chemistry, biological science, or related science.

Note: This program is seeking accreditation through NAACLS**.

**National Accrediting Agency for Clinical Laboratory Sciences
5600 N. River Rd, Suite 720, Rosemont, IL 60018-5119, Phone (773) 714-8880, FAX (773) 714-8886, info@naacls.org

AFFILIATED SCHOOLS:
Students admitted into the program will possess a Bachelor’s degree from a regionally accredited college or university. Students expected to have completed their Bachelor’s degree prior to the MLS program start date may apply. At this time, the UF Health School of Medical Laboratory Science – Jacksonville does not have any affiliation agreements. Students successfully completing the program are awarded a Certificate of Completion by the medical center.

ADMISSION REQUIREMENTS

1. Prerequisite Coursework from a Regionally Accredited College or University Include:
   a. Bachelor’s Degree: A Bachelor’s degree in chemistry, biological science, or medical laboratory science:
      1. Chemistry: A minimum of 16 semester hours acceptable toward a major in chemistry or medical technology to include one full academic year of general chemistry with laboratory, two semesters in organic chemistry or biochemistry with laboratory and a minimum of 6 semester hours of biological science to include general biology, and microbiology (including bacteriology). Survey and introductory courses are not acceptable. Additional recommended courses include quantitative analysis, clinical chemistry and instrumental analysis, or
      2. Biological Science: A minimum of 16 semester hours acceptable toward a major in biology or medical laboratory science to include general biology, microbiology (including bacteriology) or
      3. Medical Laboratory Technology: A minimum of 24 semester hours of medical laboratory technology courses, or
      4. Other Science Degree: A minimum of 24 semester hours of science courses that include 6 semester hours of chemistry, 6 semester hours of biology, and 12 semester hours of courses in chemistry, biology or medical laboratory science. Not all Bachelor’s degrees qualify.
2. **Mathematics:** For all degree paths, a minimum of one course in college level mathematics to include algebra, trigonometry and/or calculus. Minimum requirements are met by courses recognized as prerequisites for admission to physics courses.

3. **Recommended Courses:** Two semesters of physics, computer science, statistics, genetics, anatomy and physiology, biochemistry, molecular biology and immunology.

4. **General Requirements Include:** Sufficient credit hours for additional courses to satisfy all pre-clinical requirements of the college/university and ensure a broad academic background, including English, social science, and humanities in which the student is enrolled in order to be eligible for a Bachelor’s degree prior to the start of the clinical program.

5. **Minimum Grade Point Average:** A minimum overall grade point average of 2.5 on a 4.0 scale. Only courses with grades of "C" or better will be considered in evaluating the prerequisite requirements listed above.

**CRITERIA FOR STUDENTS WITH DATED COURSE WORK:**

All required courses must have been completed no more than seven (7) years before application is made. Courses completed before this time must be updated in a manner acceptable to NAACLS:

- Recent and relevant work experience in the prerequisite content areas or within a clinical laboratory.
- Successful completion of self-study units with examinations resulting in academic and/or clinical credit.
- Updated course work applicable to a degree with a minimum of a "C". (Most often in upper level Chemistry, Immunology, and Microbiology courses).

Applicants will be evaluated by the Selection Committee on a case-by-case basis.

**CREDIT FOR PREVIOUS LABORATORY EXPERIENCE:**

Applicants may be eligible to receive credit for previous clinical laboratory experience or training. Requests for consideration must be made in writing to the Program Director at the time of application. Students must submit transcripts from all previous training establishments and/or documentation of all previous experience. The Selection Committee will evaluate all transcripts and prior work experience to determine whether the student is eligible to be tested for credit. Both written and practical examinations are used to determine whether any credit for previous training or experience can be granted, thereby reducing the length of the Program. Applicants, however, are urged to participate in the entire 50-week program regardless of their previous experience. For credit to be received a student must pass all written and practical examinations for a given subject area (Microbiology, Hematology, Chemistry, Immunohematology/Blood Banking, Immunology/Serology, or Clinical Microscopy) with a score of 70% or better prior to entering the program.
MINIMUM TECHNICAL STANDARDS

The essential functions (technical standards) are the essential non-academic requirements of the program and are functional capabilities required in order to successfully participate in the program.

1. Visual acuity to identify cellular structure under the microscope.
3. Physical and manual dexterity to collect, process and analyze lab test specimens in a timely fashion as well as process sharps, and biological and chemical hazards without endangering self and others.
4. Ability to communicate with patients, visitors and other medical staff (written and oral or written and sign language).

Americans with Disabilities Act (ADA) Essential Functions are discussed with applicants at the time of interview. Copies of ADA Essential Functions are distributed to students at the time of acceptance into the program. For a comprehensive list, refer to Appendix 2 of the Student Manual.

COMMUNICATION:
The Medical Laboratory Science Student must be able to:

1. Follow verbal and written instructions.
2. Communicate with faculty members, fellow students, laboratory staff, and other health care professionals both verbally and in writing.
3. Clearly instruct patients prior to specimen collection.
4. Independently take examinations (written, practical, computer).

MOVEMENT:
The Medical Laboratory Science Student must be able to:

1. Move freely and safely around the laboratory.
2. Reach laboratory bench tops and shelves.
3. Reach patients (both lying and seated) and maneuver equipment for specimen collection.
4. Perform moderately taxing continuous physical work, often requiring prolonged standing or sitting, over several hours.
5. Perform fine hand manipulations with dexterity.
6. Use a computer keyboard.

OBSERVATION:
The Medical Laboratory Science Student must be able to:

1. Read and comprehend text, numbers, and graphs displayed in print or on a video monitor.
2. Observe laboratory demonstrations.
3. Characterize the color, odor, clarity and viscosity of biologicals and laboratory chemicals/reagents.
4. Use a binocular microscope to discriminate among fine structural and color (hue, shading, and intensity) differences.

Upon acceptance into the program the student will be required to sign a statement documenting that they have read and understand the essential functions of a Medical Laboratory Science student.

APPLICATION SELECTION AND ADMISSION PROCESS

Admission to the UF Health Jacksonville School of Medical Laboratory Science Faculty is open to qualified students. Entrance dates are early January of each year. Applications and supporting documentation should be submitted at least five (5) months before the date for which admission is requested. Applications and supporting documentation (with the exception of Letter of Conditional Eligibility) for January admission must be received by August 3rd of each year. Once the application and documents have been received by the Program, applicants will be notified to schedule their interview. Applicants that have not completed their Bachelor’s degree prior to the start of the program, must furnish a Letter of Conditional Eligibility from the Registrar of their college or university at least two (2) months before the date for which admission is requested. These students may be admitted to the program on a conditional basis. Should the student fail to obtain their Bachelor’s degree or be eligible for their Bachelor’s degree prior to the start of the Program,
the offer of acceptance to the Program will be withdrawn. Up to 6 students are accepted per year. It is the applicant’s responsibility to see that all required materials are forwarded as necessary.

Correspondence by US Postal service must be sent to:
Program Director
UF Health Jacksonville School of Medical Laboratory Science
UF Health Jacksonville
580 West 8th Street, Box T-56
Jacksonville, Florida 32209-6597

Correspondence via email must be sent to:
RSVP-MLS@jax.ufl.edu

Please submit the following:

1. Complete UF Health Jacksonville School of Medical Laboratory Science application form at https://ufhealthjax.org/education/medical-laboratory-science/

2. A $25.00 application fee. Payment may be made by credit card, check or money order payable to the UF Health Jacksonville and place School of Medical Laboratory Science on the MEMO line on the check or money order and submit with your application. Payments in cash may be made directly to the Cashier’s office on the first floor of the clinical center. Credit card payments may be made over the phone to the Cashier’s office at 904-244-2298. Reference all payments through the cashier be applied to cost center 610200, subaccount 491000.

3. Request the Cashier’s office forward proof of Application fee payment to you for student records and promptly forward proof of payment to Program staff at RSVP-MLS@jax.ufl.edu. Include your name in the subject.

4. Official transcripts, mailed directly from the registrars’ office from all colleges and universities attended. In addition, spring and fall semester transcripts for January applicants are to be forwarded as soon as available from the registrar's office.

5. List of courses in progress, or scheduled courses from the registrar’s office

6. Three (3) references. The program staff will email reference forms to the individual references on the application.
   i. At least two (2) references must be from college/university biology and/or chemistry professors
   ii. The third reference may be a professional reference.
   iii. The applicant is responsible for following up and insuring that these references be mailed or emailed timely to the Program Director, UF Health Jacksonville School of Medical Laboratory Science

7. A letter of eligibility or conditional eligibility contingent upon successful graduation with a Bachelor’s degree. Degree candidates must submit a letter of “anticipated graduation” from the registrar's office of their school.

8. A brief biographical sketch and personal statement describing why the applicant has chosen the field of Medical Laboratory Science

9. Official foreign transcript evaluation to be forwarded to the Program Director, UF Health Jacksonville School of Medical Laboratory Science, by the transcript evaluation office. (Foreign degree applicants only.)
Foreign Transcript Evaluation
Individuals who possess a foreign Bachelor’s degree may be considered for admission if enrolled in a United States college/university integrated medical laboratory science program, or if admitted to an accredited graduate program in a United States college/university whereby the college/university has accepted the foreign degree.

Only those students who have completed their education in a foreign country and will not be awarded a United States Bachelor’s degree from a regional accredited college/university are required to submit a transcript evaluation verifying United States Bachelor’s degree equivalency before consideration for admission into the program.

Foreign transcripts should be sent to one of the foreign transcript evaluation agencies. A list of acceptable foreign credential evaluation services can be found at the Department of Health/Florida Board of Clinical Laboratory Personnel (DOH/BCLP) website at http://floridasclinicallabs.gov/resources/

Selection Process
Factors for consideration in the selection process include grade point average (GPA) (science & overall), recommendations, volunteer service, work experience, number of repeated classes, course grades of D and F, and the interview. Select students will be asked to interview. Interviews are conducted by three or more members of the Admissions Committee after reviewing the candidate's completed file. Personal interviews will be arranged through the Program Director and Program Staff.

The admissions committee consists of the Program Director, Medical Director, faculty, and/or members of the Advisory Committee. The interview is used as a means to assess each applicant’s motivation, goals, communication skills, professional conduct, interpersonal skills and a realistic concept of commitment to the medical laboratory science profession.

After all applications are reviewed and the selected applicants have been interviewed, the Admissions Committee chooses six of the best candidates for initial admission and creates a pool of alternate candidates. At least four (4) month prior to start date, applicants are notified of acceptance or denial along with letters to alternates.

Admission may be refused to any student who does not meet stated criteria.

A fee of $300.00 (subject to change) is required with the student's acceptance letter into the program. This fee is non-refundable and is applied toward tuition.

UF Health Jacksonville and the Program do not discriminate on the basis of age, race, gender, color, creed, religion, national origin, disability, or any other classification.

STUDENT EXPENSES AND LICENSING FEES

Acceptance Fee
A fee of $300.00 (subject to change) is required to hold the student’s position in the program and will be applied toward tuition costs of the program. Instructions will be given with the student’s acceptance letter into the program on how to pay the acceptance fee. This fee is non-refundable if the student later declines their position.

Tuition
After paying the acceptance fee, the student must pay tuition in full within 2 weeks of the start of the program. Payment instructions will be included in the student’s acceptance letter.

Total tuition, including the acceptance fee and textbooks is $3000.00.

Tuition Refund
Students withdrawing from the Program will be refunded tuition according to the refund schedule found in the Tuition, Fees and Refunds Policy, i.e., withdrawal in the first week, 75%; second week, 50%; third week 50%; and after the third week, no refund will be given.
**Textbooks and Supplies**

Required textbooks are purchased by the school and included with the cost of tuition. At completion of the program, the books become the property of the student. Should a student leave the Program prior to graduation, textbooks must be immediately returned to the School.

There are two recommended texts that a student may choose to purchase.

1. *Taber’s Cyclopedic Medical Dictionary, 23rd Edition* (or an equivalent medical dictionary) is an optional text, list approx. $53.
2. *Henry’s Clinical Diagnosis and Management by Laboratory Methods, 23rd Edition*, is an optional text, list approx. $195.

Reference books in the Student Reference Bookcase are available for student use but may not be removed from the laboratory area. The Borland Library, located at the UF Health Jacksonville campus may be used as a resource through University of Florida Health Science Center.

Students will be provided with a subscription to MediaLab at no cost to the student for use throughout the program.

The student is responsible for providing all miscellaneous school supplies such as a calculator, notebooks, paper, pens, etc.

**Uniforms**

Wine colored scrubs and white lab coat is the official UF Health Jacksonville School of Medical laboratory Science uniform. Purchase and laundering of the uniforms and white lab coats is the responsibility of the student. The uniform can be purchased at many retailers locally and online.

**Licensing and Certification Examination Fees**

To meet individual agency deadlines, some applications for national certification examination and state licensure by endorsement are made while the student is still in their clinical rotation. Fees vary among examinations and are submitted with each application. Below lists licensing information for national and state agencies.

**Florida Department of Health (DOH) Student Trainee** $45.00 fee (subject to change)
- Required by the DOH/BCLP* when application is made for licensure as a trainee.
- Students are not permitted to begin clinical rotations until issuance of a training license by the state of Florida. The training license application may be found at [http://floridasclinicallabs.gov/resources/](http://floridasclinicallabs.gov/resources/)

**Florida Department of Health Clinical Laboratory Technologist** $100
- Paid after successful completion of NAACLS approved program and passing of either ASCP or AAB exam
- See Florida rules at [https://www.flrules.org/Gateway/View_notice.asp?id=25292767](https://www.flrules.org/Gateway/View_notice.asp?id=25292767) for license requirements

**ASCP** $240
- paid while in the 2nd half of their program

**AAB MT** $165 Generalist + $30 Proctor Fee
- paid while in the 2nd half of their program

**Liability Insurance**

Students are employed by UF Health Jacksonville, therefore liability insurance is not required.
ORIENTATION

It is the policy of UF Health Jacksonville and the School to provide a carefully planned introduction and orientation program of information to help all new students learn more about the Hospital and School and what is expected of them.

While in hospital orientation, students are scheduled to attend a one-day Hospital orientation program which includes: infection control; personnel policies; public relations telephone training; quality assurance procedures; techniques of body mechanics; fire safety; loss prevention policies; risk management; insurance policies; Standard Precautions; Right to Know; HIV-AIDS; confidentiality; Americans with Disabilities Act; OSHA Blood borne Pathogen Standards.

The school's student orientation program is scheduled the first few days of the Program year and includes, among others: anatomy of a medical laboratory scientist; history of the School; professional ethics, dress code, conduct and appearance; philosophy and goals of the program; clinical features, resources and physical layout; curriculum breakdown; academic and non-academic objectives, standards and review; grade assignment; pass-fail criteria; academic and non-academic probation and dismissal; appeals process; surveys and evaluations; risk management, safety, Standard Precautions, confidentiality and Essential Functions.

STUDENT BENEFITS

The following benefits are provided by UF Health Jacksonville plans at no cost to the student:

- **Medical** – GatorCare Prime medical plan – Employee Only coverage – Automatically enrolled effective the first day with UF Health Jacksonville.
- **Dental** – DHMO plan
- **Life Insurance** - $10,000

**Emergency Treatment**

Emergency treatment and follow-up for school related injuries during activities on the Hospital premises will be furnished by the Hospital, at no cost to the student. All accidents, injuries and emergency medical care related to a student’s training within the departments of the laboratory including exposure to blood, body fluids, or hazardous chemicals will be initiated by reporting to Employee Health during normal business hours (the Emergency Department for after hour treatment) and completing an Incident Report. Serious injuries requiring immediate medical attention will report directly to the Emergency Department. All follow-up care will be handled by Employee Health.

**Health History Screen**

After the position is accepted, all students will complete a health screening before beginning the program. This health screening includes completion of a comprehensive health history form, urine drug screen, and tuberculosis screen. In some instances, based on the health history findings, further information from the candidates Primary Care Physician or Specialist may be required. Students are required to provide documented immunity to measles, mumps, rubella and varicella as well as documentation of completion of the COVID vaccination series or an approved exemption prior to the start of the program. Students must also receive the influenza vaccine prior to start of the program. All screening services are provided through Employee Health, free of charge. Students who fail the health and/or drug screening will be dismissed from the program.

**Parking**

Free parking is available for students in designated employee parking areas. Students are not to park in patient or reserved parking locations.

**Guidance and Counseling**

The Program Director is available for advising and guiding students through the program, as are faculty and other laboratory staff. When students have questions or concerns about their progress through a rotation or lecture series, they should first meet with their rotation or lecture instructor when possible. Department supervisors, the Education Coordinator, the Program Director as well as laboratory management may also be consulted. Anytime an instructor has concerns about student progress in the program, he or she should express those concerns to the individual student as well as the Program Director. Attempts should be made to address concerns at the lowest level possible. Program officials will maintain confidentiality and impartiality in all interactions with students. Anecdotal records, formal student conference forms or performance evaluation forms can be used to document these interactions. Records will be
maintained in confidential student files or another secure location. Counseling of a more serious nature will be referred 
to social agencies or the student’s health care team.

**Library Privileges**

**Medical Library**
The Borland Medical Library privileges will be extended to all Medical Laboratory Science students as 
employees of UF Health Jacksonville. Services include literature searches, article retrieval, training, 
and computer access. The library is located in the LRC building and is open during normal business 
hours.

**School of Medical Laboratory Science Library**
The School of Medical Laboratory Science also has a small library pertinent to the student’s clinical 
education. Books may be checked out from the Program Director but are not to leave the school. Time 
limits may apply.

**SERVICE WORK AND PART-TIME EMPLOYMENT**

Students do not take the responsibility or the place of qualified staff. The students will not be encouraged or allowed to 
engage in repetitive tasks that add no educational value. All tasks completed by the student must be under the direct 
supervision of a qualified medical laboratory scientist.

Students with a minimum of a B in each course may be given the opportunity to work as laboratory assistants as a 
separate entity from the Program. If students wish to perform work outside of regular academic hours it is 
noncompulsory, paid, supervised, on site, and subject to employee regulations and based on departmental staffing needs

**STUDENT RECORDS**

Student records shall be permanently maintained as confidential documents as a hard copy and electronic copy in the 
Program Director’s files or in Iron Mountain Archives. These records contain documents related to student admission 
records, progress in the program and transcripts.

The program transcript will include:

1. Legal name and identifying number specific to the student such as birthdate or social security number
2. Grades and credits
3. Dates of admission and completion

Student records are open to the student at her/his request with the exception of reference letters if the student has 
waived the right of access. The student file will be reviewed in the presence of the Program Director.

Transcript requests must be in writing and will be sent within 7 days of the request.

Current students are required to immediately report any change in their name, address, email address and telephone 
numbers.

Note: Certificate copies of the mandatory orientation of all the students in the program, including a signed 
acknowledgment of HIPAA, Code of Conduct, Drug Free Campus and Core Values are held in School student records. 
It is the student’s responsibility to print these certificates and present to the Program Director for placement in the 
student’s permanent record. Employee Health will maintain a copy of the student’s required health records.
PERSONNEL ISSUES

Time Off and Holidays
The student will have ten (10) days of time off during their 11.5 month clinical year. This time off is prearranged with one week in March and one week in July. Time off during Hospital holidays is considered part of the 10 days.

Students, as unpaid employees, do not accrue personal time.

Students will be entitled to all official Hospital holidays as they apply to hospital personnel. The School of Medical Laboratory Science will recognize the following as holidays:

- New Year’s Day (January 1) *
- Martin Luther King’s Birthday (3rd Monday in January)
- Memorial Day (last Monday in May)
- Independence Day (July 4)*
- Labor Day (first Monday in September)
- Thanksgiving Day (4th Thursday in November)
- Friday following Thanksgiving Day
- Christmas Eve (December 24) *
- Christmas Day (December 25) *
- * May be included in vacation time.

Attendance
Students must attend their assigned area each day that they are scheduled during the 11.5-calendar month program. Students must be physically and mentally capable of performing their assignments. Clinical rotation start times may vary depending on training activities. Students must communicate with the clinical instructors for reporting times. In the event of a hurricane students are only expected during normal operation. Missed days will be made up at the discretion of the Program Director and faculty.

Students must abide by UF Health Jacksonville School of Medical Laboratory Science policy pertaining to tardiness. Tardiness shows a lack of consideration for the instructors and the other students within the program. Per the policy, tardiness is defined: team members are considered tardy if they are not at their work area, in uniform, and prepared to work at the start of the scheduled time. Students will be evaluated on their promptness as part of each of their clinical rotations. Students are required to clock into the time keeping system using their identification badge at their designated start time plus or minus 5 minutes. Variances outside the student’s start time are considered “Tardy”. If the student is delayed by more than 15 minutes, a call to the department is expected.

Call Outs
“Call outs” or unscheduled absences for any reason are counted as an “unexcused” and are subject to Corrective Action. Any missed time exceeding 2 days or 15 percent of a single clinical rotation must be made up (in the department that was affected) prior to graduation in order to graduate and receive a certificate. Due to the nature and schedule of our program we may not be able to accommodate extended periods of make-up time. In the event a student is unable to complete a full shift, hours in attendance less than 6 hours is considered an absence. Students are expected to be in their assigned rotation and ready at the start time specified for that rotation. This is in keeping with our mission to graduate professional laboratory personnel. Should an unscheduled absence, or “calling in sick” become necessary, notify your preceptor, instructor or other department staff in your assigned rotation at least 2 hours before you are scheduled to report. Identify yourself as a student, and ask to speak to the technologist in charge, Supervisor, or Technical Specialist of the assigned rotation and report your absence. Email and leave a voice mail to the Program Director at Ramona.abraham@jax.ufl.edu and 904-244-9240. You MUST call in any time you will be absent unless prior approval was obtained. Always notify your clinical instructor anytime you will not be present or need to leave early.
**Unexcused Absences**

Unexcused absences and tardiness corrective actions are not independent of each other. A corrective action for any disciplinary event will be taken into consideration on all future corrective actions. Corrective actions will remain on the student’s record for 12 months from the date of the event. Unexcused absence time must be made up before the student is eligible for graduation. It is the responsibility of the student to make arrangements with the Program Director for make-up time. A student meeting the threshold of unexcused absences may be dismissed from the Program on the basis of excessive absenteeism. Refer to the chart below. For more information, refer to the UF Health Jacksonville School of Medical Laboratory Science Time and Attendance Policy. The following disciplinary actions will be taken:

<table>
<thead>
<tr>
<th>Attendance Occurrences</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two (2) within four months</td>
<td>Counseling (written)</td>
</tr>
<tr>
<td>One (1) additional within 2 months of most recent corrective action</td>
<td>Written Reprimand</td>
</tr>
<tr>
<td>One (1) additional within 2 months of most recent corrective action</td>
<td>Suspension</td>
</tr>
<tr>
<td>One (1) additional within 2 months of most recent corrective action</td>
<td>Termination</td>
</tr>
</tbody>
</table>

**Tardiness**

There will be a five (5) minute grace period before an occurrence is considered a tardy. If there is a pattern of abuse to the grace period then the Program Director has the right to revoke the grace period. For more information, refer to the UF Health Jacksonville School of Medical Laboratory Science Time and Attendance Policy. Attendance will be carefully monitored and tardy time or leaving early will be tracked to determine the need for make-up time. The following disciplinary actions will be taken:

<table>
<thead>
<tr>
<th>Tardy Occurrences/Leaving Early</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four (4) within four months</td>
<td>Counseling (written)</td>
</tr>
<tr>
<td>Two (2) additional tardies within 2 months of last corrective action</td>
<td>Written Reprimand</td>
</tr>
<tr>
<td>One (1) additional tardy within 2 months of last corrective action</td>
<td>Suspension</td>
</tr>
<tr>
<td>One (1) additional tardy within 2 months of last corrective action</td>
<td>Termination</td>
</tr>
</tbody>
</table>

**Corrective Action Impact on Grades**

Corrective actions will impact student grades. While evaluation forms provided by clinical and didactic faculty on the student’s professional attributes and affective evaluations are part of the student’s grade for that rotation, corrective actions will have a more serious impact on the student’s grades. The impact of corrective actions will be progressive and cumulative up to and including dismissal from the program should grades fall below the Program’s academic standards. Grade deductions will occur in the practicum experience or didactic phase within the course in which Corrective Action occurs. As an example, if the first Corrective Action occurs in Hematology lecture, the course final grade will be reduced by 5%. If the second Corrective Action occurs in Chemistry practicum, the Chemistry practicum final grade will be reduced by 10%. This will continue until the student is either dismissed for academic performance and/or progressive discipline.

<table>
<thead>
<tr>
<th>Corrective Action</th>
<th>Grade Impact of Current Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>5%</td>
</tr>
<tr>
<td>Second</td>
<td>10%</td>
</tr>
<tr>
<td>Third</td>
<td>15%</td>
</tr>
<tr>
<td>Fourth</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Breaks and Lunches**

During the clinical phase, students will be allowed one 15-minute rest break during the morning or afternoon depending on the department and one 30-minute meal break. Students are to follow the break protocol of the department. Students are to take breaks while their instructor takes their breaks in order to maximize instruction time. Students must meet with designated faculty at the beginning of the rotation to find out their time allotments. When leaving the department for any reason, you must inform your instructor(s). Punctuality is expected and students should abide by the time allotment. During the didactic phase, students will be given course breaks and one 30-minute break. Abuse of breaks will result in disciplinary action. As UF Health Jacksonville team members; professionalism is expected in areas outside of the laboratory and on hospital grounds. Students are not permitted in guest waiting areas. Delinquency will lead to verbal then written warnings – refer to Dismissal policy.
NOTE: EATING AND DRINKING ARE STRICTLY PROHIBITED IN THE TECHNICAL AREAS OF THE LABORATORY. Smoking is prohibited on the UF Health Jacksonville Campus. There are NO designated smoking areas on campus.

**Weekly Schedule**
The typical hours of the didactic phase of the program will be 8:00 am through 4:00 P.M, Monday through Friday. Clinical rotation hours are typically 6:30 A.M. through 3:00 P.M. or 8:00 A.M. through 4:30 P.M., Monday through Friday but some clinical departments may have different schedules. It is important to check with each department about their particular hours.

**Dress Code**
Dress and grooming are an indication of each team member’s personal pride and expression of UF Health Jacksonville’s overall high standards. It is important that each team member presents a personal appearance in which both the patients and public alike can place their confidence. Students must abide by UF Health Jacksonville’s Dress Code and Standard of Appearance policy.

*Scrub Uniforms:* Wine color "Scrub" uniforms of an approved style are provided, and cared for, by the student. More detailed information is available upon request.

*Laboratory Coats:* Students will be furnished with disposable lab coats to wear as protection while working with patient specimens. These laboratory coats are considered “dirty” and are to be removed before leaving the laboratory. Students must wear a fabric white or wine-colored laboratory coat when leaving the laboratory for other activities including meal breaks.

**Non-Discriminatory Policy**
No form of discrimination on the basis of age, gender, race, color, creed, religion, national origin, disability, sexual orientation, or any other classification prohibited by law, will be permitted. Harassment is aggressive pressure or intimidation. Harassment includes unwelcome or unsolicited verbal, non-verbal, printed, electronic mail, or physical conduct which substantially interferes with an employee’s or a student’s performance or which creates an intimidating, hostile, or offensive environment. Each allegation of harassment or discrimination will be promptly investigated in accordance with applicable UF Health Jacksonville policies. Refer to HR-01-004 for the full policy on Harassment, Sexual Misconduct and Inappropriate Workplace Conduct. Students must abide by UF Health Jacksonville’s Code of Conduct.

**Professionalism**
All UF Health Jacksonville team members (including students) are expected to behave in all interactions with every patient, visitor, and member of the healthcare team with professionalism. At the heart of all our actions UF Health Jacksonville’s mission to heal, to comfort, to educate and to discover through quality health care, elimination of health disparities, medical education, innovation and research.

**Safety**
Orientation will include a lecture on safety, safety policies of the hospital and laboratory, and a tour of the laboratories safety features with the laboratory safety officer or other designated staff member. Students are required to complete a safety checklist and submit a copy to the Program Director for student records.

**Health Insurance Portability and Accountability ACT (HIPAA)**
Health Insurance Portability and Accountability ACT (HIPAA) is a federal regulation regarding patient privacy. Maintaining patient privacy is everyone’s responsibility. Violation of patient privacy will result in disciplinary action, up to and including dismissal from the program. Students will be required to sign a HIPAA acknowledgement.

**Information Management**
Students must read, sign off, and abide by UF Health Jacksonville’s policy on Employee Computer Utilization and Responsibilities numbered HR-01-008 found under HR Policies on the Bridge. Any computer-related questions please call the Help Desk at extension number 904-244-7828.
Incident Reporting
An incident is any occurrence, which represents a departure from the norm, and unexpected event, or an event with an unfavorable outcome. Incidents should be immediately reported to the program director and a supervisor or manager. If the incident affects your health you will be required to report to the Employee Health clinic in the Towers.

Reasons for Dismissal

Academic - Each student must maintain a minimum overall grade average of 76% to avoid academic probation and/or dismissal and must successfully pass each unit of instruction. The Admissions Committee routinely reviews student files.

Cheating – Cheating, as exemplified by obtaining or providing test questions in advance of an exam, obtaining or providing test answers during the administration of an exam, or in any way representing another person's work as your own.

Professional and Non-Academic - A student may be dismissed for non-academic reasons such as breach in medical ethics, misconduct, dishonesty, habitual tardiness, excessive absenteeism, failure to follow required safety regulations, use of obscene, abusive or threatening language, etc., as described in the Policy and Procedure Manual. The Policy and Procedure Manual is distributed during the School's student orientation.

Identification Badges
Each student is issued a photo identification badge that is to be worn at all times the student is on Hospital premises. A $25.00 fee (subject to change) is required to replace lost badges.

EVALUATIONS AND METHODS OF EVALUATION

Students are evaluated by the clinical faculty during each department rotation. Evaluations encompass the knowledge, skills, and attitudes (cognitive, psychomotor, and affective domains) demonstrated by the student during the rotation and are a portion of the rotational grade. Students, in turn, are requested to evaluate the rotations, lectures, and program. Comments and constructive criticisms are vital to the welfare of the program and student cooperation in completing thought-out evaluations is solicited.

Evaluations are also periodically completed by faculty, employers, staff, and graduates. The evaluations are used as a systematic assessment to ensure continuous quality improvement of the program, ensure the program is meeting the established goals, and students achieve necessary competencies. Results are documented as outcome measures which are periodically analyzed and evaluated during Advisory Committee and faculty meetings at least every three months.

The assessment of knowledge, skills and affective behavior are achieved in the evaluation procedure. These are achieved by written examination, oral and written quizzes, case history problems, unknown identification, laboratory practical examinations, oral presentations and/or written papers. The instructor in each departmental rotation using a Department Evaluation Form as a clinical performance rating and a Professional Attributes form to assess core behaviors.
PASS-FAIL CRITERIA

The final grade for each major course is weighted as follows:

- Departmental grade (practical): 45%
- Lecture series grade (didactic): 45%
- Comprehensive final examination: 10%

The minimum grade for any didactic or practicum assessment, practicum procedure, comprehensive exam, or any other gradable item in the program is a grade of 76%. The final course grade is weighted with practicum at 45%, didactic at 45%, and comprehensive final exams at 10% of the total grade.

Final grades are assigned for each major course based on the following scale:

- 93 - 100 = A
- 84 - 92 = B
- 76 - 83 = C
- 70 - 75 = D
- 0 - 69 = F

A grade of "C" or better in each course is required before a Certificate of Completion is awarded by the medical center.

A student is allowed to repeat only one failed didactic course or clinical rotation during the Program. Failure of the same course or rotation an additional time or failure of more than one course or clinical rotation may result in recommendation for dismissal from the program. The repeat of a failed course or clinical rotation will be scheduled by the Program Director and the department. The repeated rotation may involve the repeat of the entire clinical rotation or only a portion of the rotation. The requirements for the repeat didactic course or rotation will be on a written Student Improvement Plan that is agreed upon, monitored, and assessed by the Program Director, the department faculty and the student. Repeat of a clinical rotation will result in late graduation from the Program.

ACADEMIC DISHONESTY

Cheating is defined as the unauthorized granting or receiving of aid during the prescribed period of a course-graded assessment. Students may not consult notes, books, look at the paper of another student, access their phone, or consult orally with any other student taking the same test. Rotation exams are taken at different times throughout the year, and students are on the honor system and expected to keep tests, test questions, answer keys, or any other assessment material confidential. Simply stated assessments are not to be shared verbally or physically in any way - on social media or any other computer or phone applications.

Exchanging assessment information with other students or using prohibited materials during the course of a lecture assessment or during the course of a clinical rotation assessments shall result in a grade of “0” on the assessment(s). It is the Program Director’s discretion to fail the student on the exam or to dismiss the student from the program permanently.
**STANDARD OF CONDUCT**

Students must review and abide by the Program Policies stated and/or referenced in the Student Handbook and UF Health Jacksonville’s policies, procedures, professionalism, and values reviewed during orientation. UF Health Jacksonville values encompass excellence, respect, compassion, and stewardship. Personal conduct is expected to reflect UF Health Jacksonville and the School’s standards at all times.

It is expected that students will be:

1. Honest in their verbal and/or written communications with all personnel, students, patients, and visitors of the medical center.
2. Courteous in interactions with all personnel, students, patients and visitors.
3. Conscientious in carrying out assignments.
4. Punctual.
5. Respectful of patient confidentiality.
6. Cooperative with personnel and other students in accomplishing the goals of the Program, the laboratory, and the medical center.

A student may be dismissed from the program for any Class III offense. For a comprehensive list of offenses, refer to HR-02-010 AppA for more information. Some examples of Class III offenses are listed below:

1. Cheating, as exemplified by obtaining or providing test questions in advance of an exam, obtaining or providing test answers during the administration of an exam, or in any way representing another person's work as your own.
2. Repeated failure to follow required safety regulations.
3. The use of obscene, abusive or threatening language to any employee, student, patient or visitor of the medical center.
4. Bringing to the medical center, possessing or consuming in the medical center any intoxicant (including alcoholic beverages), illegal drugs, or narcotics, or reporting to the laboratory under the influence of any intoxicant (including alcoholic beverages, drugs which are not prescribed, or narcotics).
5. Gambling or participating in games of chance on the medical center premises. Certain raffles or lotteries receiving Administrative approval are accepted.
6. Stealing, misappropriating or intentionally damaging property belonging to the medical center, its employees, students, patients or visitors.
7. Divulging confidential patient information.
8. Falsification of information within the student application file.
9. Participating in fighting, disorderly conduct, "horseplay", practical jokes or pranks while on the property of the medical center.
10. Harassment of other employees, patients or visitors, including racial, age related or sexual slurs, which would affect a discourteous or disrespectful attitude by one person towards another.

**FLORIDA STATUTE AND DISCIPLINARY ACTION:**

Students are licensed as trainees by the State of Florida, and grounds for disciplinary action against clinical laboratory personnel as stated in Florida Statute 483.825 (refer to APPENDIX 4) will be grounds for disciplinary and/or legal action against the student.

**OTHER CRITERIA FOR UNACCEPTABLE PERFORMANCE:**

1. Unprofessional conduct of any kind will subject a student to disciplinary measures which may include dismissal. All students are expected to act in a responsible manner and maintain a professional attitude at all times while on the hospital’s grounds. Self-discipline and sensitivity to the rights and interests of others are the principal elements of our disciplinary policy.
2. Unacceptable conduct includes persistent and deliberate disregarding of rules and regulations of the hospital; disrespect towards instructors, co-workers, patients; cheating; and failure to maintain acceptable performance in all courses.
3. Each individual is expected to earn his or her certificate on the basis of personal effort. Therefore, any form of academic dishonesty will not be tolerated.
4. When a student’s performance is unsatisfactory in a section, usually several of the following criteria are involved since they are interrelated. If warranted, a Performance Improvement Plan may be instituted to address unsatisfactory performance.
5. Unacceptable performance after the Performance Improvement Plan has been implemented and completed is as follows:
   a. After having been taught a procedure and after a “practice period” the student is unable to achieve accurate results using acceptable techniques.
   b. After receiving the proper directions and precautions, the student exhibits carelessness in handling specimens, laboratory equipment, or instruments.
   c. After receiving instructions and watching demonstrations, the student continually shows disorganization, in attention to detail, or lack of regard for written protocol.
   d. After being given assignments, readings, lectures, and discussions as applicable, the student is unable to demonstrate knowledge of the subject matter and is unable to attain a final average of 76% or greater in each area of the subject (didactic, rotation written exams, rotation practical exams).

**DISCIPLINARY ACTION/DISMISSAL**
Disciplinary action is warranted should a student not abide by UF Health Jacksonville’s policies, the school’s policies, or the student handbook. The nature of the infraction will dictate the corrective action. All infractions will fall into Class 1, Class II, or Class III infractions. Refer to policy # HR-02-010 and HR-020-010 AppA. The Program Director will discuss any unacceptable performance or behavior with the student. A record of counseling and/or discipline will be kept in the student’s file. The student will be made aware of any improvements needed at the time of the discussion. Students have the right to appeal disciplinary measures. Progressive disciplinary actions are as follows:

- Counseling
- Written Reprimand
- Suspension
- Dismissal from the program

**APPEALS AND GRIEVANCES**
If a student has a concern complaint or dissatisfaction they may submit a grievance to the Program Director. Please refer to the “Student Grievance and Grade Appeal” procedure for guidance in the UF Health Jacksonville’s MLS Policy and Procedures manual. Students who submit grievances will not be interfered with nor retaliated against. The student should first attempt to discuss matters with faculty and then in writing to the Program Director if an acceptable response is not received. Written responses to any step will be returned to the student with seven calendar days. Should the grievance be directed at the Program Director please submit grievance to the Medical Director. The grievance must be submitted within seven calendar days of the occurrence. If the grievance is still unresolved with the Program Director, a committee composed of the Program Director (or Laboratory Director) and other members of the Advisory Committee will review all information and provide a response. Students have the right to appeal any decisions of the Program Director, Laboratory Director, or committee to human resources. Appeals must be submitted in writing within seven calendar days of the last action taken. Decisions of human resources are final.

**PROBATION AND SUSPENSION**
Students suspensions require the time missed to be made-up time prior to graduation. Students may be immediately suspended for serious offenses, refer to Refer to policy # HR-02-010 and HR-020-010 AppA.

**PROFESSIONAL MEMBERSHIPS**
Students are expected to become Student Affiliate Members of ASCP, and may join other professional societies.

**GRADUATION AND ELIGIBILITY FOR EXAMINATION**
Up on successful completion of the program, a Certificate of Completion is awarded by the medical center. The student is then eligible to take national certification examinations offered by several agencies and after successfully passing their national board exams and Florida state licensure by endorsement. The awarding of the certificate and/or degree are not contingent upon successfully passing either the state licensing or national certification examinations.

- Board of Certification: American Society of Clinical Pathologists (ASCP/BOC) *
- American Association of Bioanalysts (AAB)*
- Florida Department of Health, Board of Clinical laboratory Personnel (DOH/BCLP)*
STATE LICENSURE
Graduates of the UF Health Jacksonville School of Medical Laboratory Science and upon successfully passing one of the national certification exams, are eligible to obtain a license as Technologist in the state of Florida. Graduates are also able to work in any state requiring certification, but which do not require specific professional licensure. Requirements for additional states as listed below are current as of June 2021.

- California - Program may not be determined as substantially equivalent. Initial degree may require specific prerequisites not required by Florida.
- Hawaii, Montana, Nevada, North Dakota, Tennessee, West Virginia - Require Bachelor’s degree in MT/MLS, Clinical, Biological, or Physical science.
- Louisiana, New Jersey - Require a minimum of 90 semester hours prior to start of clinical program.
- New York - Hospital based programs are not currently recognized.

STUDENT WITHDRAWAL
It is the responsibility of each student to make every effort to complete the full Program. A certificate of completion is awarded ONLY upon completion of the entire course of study. Students must successfully complete the entire Program in order to receive a certificate from the UF Health Jacksonville medical center. Fees paid directly to UF Health Jacksonville at the beginning of the program are non-refundable.

Any student wishing to withdraw must state their intention in writing. The Program Director or Medical Director will counsel the student prior to accepting the resignation. A written summary of the reason for the withdrawal will be placed in the student’s file at the school.

TEACH-OUT PLAN
UF Health Jacksonville School of Medical Laboratory Science guarantees you will be able to finish the program should a situation arise where the school is unable to operate or ceases to operate. In the event the clinical lab or the School suddenly could not be used, it is possible that the School of Medical Laboratory Science would have to postpone training for a short duration (estimation of not more than two weeks depending on the circumstances) in order to prepare another location from which the school could operate. In the unlikely event the school and/or clinical laboratory at UF Health Jacksonville is unable to be operate, the temporary location of the school will be located at the UF Health North hospital laboratory. UF Health North hospital contains conference rooms to house lectures and a clinical laboratory that can offer clinical experiences in Chemistry, Hematology, Hemostasis, Microscopy, Immunohematology, and limited Microbiology. For clinical experiences outside of UF Health North’s scope or as an alternative temporary site, UF Health Gainesville’s laboratory may also be utilized.

EDUCATION LOANS AND SCHOLARSHIP

American Society for Clinical Laboratory Science
https://ascls.org/eandr/

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS):
https://www.naacls.org/Students.aspx
National Accrediting Agency

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
The UF Health Jacksonville MLS program is seeking accreditation
5600 N. River Rd., Suite 720
Rosemont, IL 60018-5119
Phone: (773) 714-8880
Fax: (773) 714-8886
Web site: www.naacls.org
Email: NAACLS@naacls.org

Florida Licensing Board
Department of Health
Board of Clinical Laboratory Personnel
4052 Bald Cypress Way, Bin #C07
Tallahassee, FL 32399-3258
Phone: (850) 245-4355
Web site: https://floridasclinicallabs.gov
Applications and Fees ONLY:
Department of Health
Board of Clinical Laboratory Personnel
P.O. Box 6330
Tallahassee, FL 32314-6330

American Society of Clinical Pathology, Board of Certification (ASCP/BOC)
33 W. Monroe St., Suite 1600
Chicago, IL 60603
Phone: (800) 267-2727 or 312-541-4999
Web site: www.ascp.org
Email: bor@ascp.org

American Association of Bioanalysts (AAB)
906 Olive Street, Suite 1200
St. Louis, MO 63101-1448
Phone: (314) 241-1445
Fax: (314) 241-1449
Web site: www.aab.org
PROGRAM OFFICIALS

School of Medical Laboratory Science Administration:

Yvette McCarter, Ph.D., D(ABMM), Medical Director
Professor, Pathology and Laboratory Medicine
University of Florida College of Medicine - Jacksonville
Director, Clinical Microbiology Laboratory
UF Health Jacksonville

Ramona Abraham, MS, MT (ASCP)
Program Director
UF Health Jacksonville School of Medical Laboratory Science
UF Health Jacksonville

Admissions Committee:

Yvette McCarter, Ph.D., D(ABMM), Medical Director
Professor, Pathology and Laboratory Medicine
University of Florida College of Medicine - Jacksonville
Director, Clinical Microbiology Laboratory
UF Health Jacksonville

Matthew Feldhammer, PhD, DABCC, NRCC, FAACC
Assistant Professor, Department of Pathology and Laboratory Medicine
Director, Clinical Chemistry, Toxicology, and Point of Care Testing
University of Florida College of Medicine-Jacksonville
Medical Director, Wildlight Laboratory

Ramona Abraham, MS, MT (ASCP)
Program Director
UF Health School of Medical Laboratory Science
UF Health Jacksonville

Amanda Goglia, BS, MLS (ASCP)
Microbiology Supervisor
UF Health Jacksonville

Kathryn Voorhees, MLS (ASCP)cm, BSCLS, MHA
Hematology and Coagulation Supervisor
UF Health Jacksonville

Sonia Rivera, BS, MT (ASCP)
Transfusion Services Supervisor
UF Health Jacksonville

Advisory Committee:

Frederick Schumann, MHA, MT (ASCP)
Director Laboratory Administration
Advisory Committee Chair
UF Health Jacksonville

Ramona Abraham, MS, MT (ASCP)
Program Director
UF Health School of Medical Laboratory Science
UF Health Jacksonville
Yvette McCarter, Ph.D., D(ABMM), Medical Director
Professor, Pathology and Laboratory Medicine
University of Florida College of Medicine - Jacksonville
Director, Clinical Microbiology Laboratory
UF Health Jacksonville

Matthew Feldhammer, PhD, DABCC, NRCC, FAACC
Assistant Professor, Department of Pathology and Laboratory Medicine
Director, Clinical Chemistry, Toxicology, and Point of Care Testing
University of Florida College of Medicine-Jacksonville
Medical Director, Wildlight Laboratory
UF Health Jacksonville

Jonathan Hoyne, PhD, DABCC, FAACC, FACSc
Assistant Professor, Department of Laboratory Medicine and Pathology
Department of Laboratory Medicine and Pathology
Mayo Clinic, Jacksonville, FL

Agnes Aysola, MD
Associate Professor, Pathology and Laboratory Medicine
University of Florida College of Medicine-Jacksonville
Director, Transfusion Services and Coagulation
UF Health Jacksonville

Ahmad Alkhasawneh, MD
Associate Professor, Pathology and Laboratory Medicine
University of Florida College of Medicine-Jacksonville
Director, Hematology and Flow Cytometry
UF Health Jacksonville

Alicia Fulton, BS, MT (ASCP)
Laboratory Operations Manager
UF Health Jacksonville

Carleen Van Siclen, MT (ASCP) cm
Manager, Laboratory Staff Education/Development
Department of Laboratory Medicine and Pathology
Mayo Clinic, Jacksonville, FL

Amanda Goglia, BS, MLS (ASCP) cm
Microbiology Supervisor
UF Health Jacksonville

Sonia Rivera, BS, MT (ASCP)
Transfusion Services Supervisor
UF Health Jacksonville

Ryan Wilke, MS, MT (ASCP)
Technical Specialist, Blood Bank
UF Health North

Kathryn Voorhees, BSCLS, MHA, MLS (ASCP) cm
Hematology and Coagulation Supervisor
UF Health Jacksonville
Bryan Milstid, BS, MLS (ASCP)  
Chemistry Supervisor  
UF Health Jacksonville

Ann Nelson, BS, BM, AS, MLT (ASCP), CHT (ACHI)  
Flow Cytometry and Molecular Pathology Supervisor  
UF Health Jacksonville

Crispina Marie Sy-Trias, MPH, MLS (ASCP)\textsuperscript{CM}M\textsuperscript{CM}, MT(AMT)  
Education Coordinator  
UF Health Jacksonville

Ezra Mae Magaya, BS, MLS, SH (ASCP), CLS (AMT)  
Education Coordinator  
UF Health Jacksonville

Ann Ruby, MS, MT (ASCP), SM(ASCP)  
Education Coordinator  
UF Health Jacksonville

**Program Staff:**

Crispina Marie Sy-Trias, MPH, MLS(ASCP)\textsuperscript{CM}M\textsuperscript{CM}, MT(AMT)  
Education Coordinator  
UF Health Jacksonville

Ezra Mae Magaya, BS, MLS, SH(ASCP), CLS (AMT)  
Education Coordinator  
UF Health Jacksonville

Ann Ruby, MS, MT (ASCP), SM(ASCP)  
Education Coordinator  
UF Health Jacksonville
FACULTY

The program will have qualified faculty who hold appointments within the educational program (UF Health Jacksonville School of Medical Laboratory Science). These appointees will be certified professionals in their respective fields. Faculty members will be chosen at the discretion of the Program Director, department manager/supervisor, and laboratory directors. Faculty selection will not discriminate on the basis of age, race, gender, color, creed, religion, national origin, disability, or any other classification with faculty appointments. The program will ensure and document ongoing professional development and assessment of the faculty.

The faculty will participate in instruction, supervising students, student learning experiences, evaluating student achievement, assessments, developing curriculum, formulating policy and procedures, assessment of program outcomes, and evaluating program effectiveness.

Faculty members are designated and responsible for students learning experiences and assessment assigned to their area. Faculty will ensure all procedures performed by students take place under qualified supervision. Faculty should report any issues, of any kind, with a student to the Program Director. Faculty will ensure an instructor to student ratio of 1:1 and on occasions a 1:2 throughout clinical rotations. The program will also ensure to maintain an instructor to student ratio of no more than 1:10 in all didactic areas. The faculty member shall be responsible for all grades earned by the student during the clinical rotation. Grades will be submitted to the Program Director at the end of the rotation. Faculty shall be responsible for completing the evaluation forms for each student. Evaluations are used to review the student’s performance concerning the psychomotor and affective domains and indicate areas that need improvement. The faculty and program director shall oversee student punctuality and attendance. Faculty needing assistance with any matters should contact the program director.

CLINICAL SEROLOGY & IMMUNOLOGY

Yvette McCarter, Ph.D., D(ABMM), Medical Director
Professor, Pathology and Laboratory Medicine
University of Florida College of Medicine - Jacksonville
Director, Clinical Microbiology Laboratory

Amanda Goglia, BS, MLS (ASCP) cm
Microbiology Supervisor
UF Health Jacksonville

Ramona Abraham, MS, MT (ASCP)
Program Director
UF Health Jacksonville

CLINICAL HEMATOLOGY

Ahmad Alkhasawneh, MD
Associate Professor, Pathology and Laboratory Medicine
University of Florida College of Medicine-Jacksonville
Director, Hematology and Flow Cytometry
UF Health Jacksonville

Agnes Aysola, MD
Associate Professor, Pathology and Laboratory Medicine
University of Florida College of Medicine-Jacksonville
Director, Transfusion Services and Coagulation
UF Health Jacksonville

Kathryn Voorhees, BSCLS, MHA, MLS (ASCP) cm
Hematology and Coagulation Supervisor
UF Health Jacksonville
Carleen Van Siclen, MT (ASCP)  
Manager, Laboratory Staff Education/Development  
Department of Laboratory Medicine and Pathology  
Mayo Clinic, Jacksonville, FL  

Ramona Abraham, MS, MT (ASCP)  
Program Director  
UF Health School of Medical Laboratory Science  
UF Health Jacksonville  

**CLINICAL MICROBIOLOGY**

Yvette McCarter, Ph.D., D(ABMM), Medical Director  
Professor, Pathology and Laboratory Medicine  
University of Florida College of Medicine - Jacksonville  
Director, Clinical Microbiology Laboratory  
UF Health Jacksonville  

Amanda Goglia, BS, MLS (ASCP)  
Microbiology Supervisor  
UF Health Jacksonville  

**CLINICAL IMMUNOHEMATOLOGY**

Agnes Aysola, MD  
Associate Professor, Pathology and Laboratory Medicine  
University of Florida College of Medicine-Jacksonville  
Director, Transfusion Services and Coagulation  
UF Health Jacksonville  

Sonia Rivera, BS, MT (ASCP)  
Transfusion Services Supervisor  
UF Health Jacksonville  

Brenda Carroll, BS, MT (ASCP) BB  
Transfusion Services, Technical Job Specialist  
UF Health Jacksonville  

Ryan Wilke, MS, MT (ASCP)  
Technical Specialist, Blood Bank  
UF Health North  

**CLINICAL CHEMISTRY**

Matthew Feldhammer, PhD, DABCC, NRCC, FAACC  
Assistant Professor, Department of Pathology and Laboratory Medicine  
University of Florida College of Medicine-Jacksonville  
Director, Clinical Chemistry, Toxicology, and Point of Care Testing  
UF Health Jacksonville  
Medical Director, Wildlight Laboratory  

Jonathan Hoyne, PhD, DABCC, FAACC, FACSc  
Assistant Professor, Department of Laboratory Medicine and Pathology  
Department of Laboratory Medicine and Pathology  
Mayo Clinic, Jacksonville, FL
Carleen Van Siclen, MT (ASCP) 
Manager, Laboratory Staff Education/Development 
Department of Laboratory Medicine and Pathology 
Mayo Clinic, Jacksonville, FL 

Bryan Milstid, BS, MLS (ASCP) 
Chemistry Supervisor 
UF Health Jacksonville 

**MOLECULAR DIAGNOSTICS** 

Ann Nelson, MHA, BS, BM, AS, MLT (ASCP), CHT(ACHI) 
Supervisor, Flow Cytometry and Molecular Pathology 
UF Health Jacksonville 

Brett Baskovich, MD 
Associate Professor, Pathology and Laboratory Medicine 
Associate Director of Molecular Pathology 
Mt. Sinai/Icahn School of Medicine 

Mohsin Jamal, MD 
Assistant Professor, Department of Pathology and Laboratory Medicine 
University of Florida College of Medicine-Jacksonville 
Director, Digital Pathology and Molecular Pathology 
UF Health Jacksonville 

Yvette McCarter, Ph.D., D(ABMM), Medical Director 
Professor, Pathology and Laboratory Medicine 
University of Florida College of Medicine - Jacksonville 
Director, Clinical Microbiology Laboratory 
UF Health Jacksonville 

Amanda Goglia, BS, MLS (ASCP) 
Microbiology Supervisor 
UF Health Jacksonville 

**INTRODUCTION TO MLS & MANAGEMENT AND EDUCATIONAL METHODS** 

Ramona Abraham, MS, MT (ASCP) 
Program Director 
UF Health Jacksonville School of Medical Laboratory Science 

Fred Schumann, MHA, MT (AMT) 
Director Laboratory Administration 
UF Health Jacksonville 

Crispina Marie Sy-Trias, MPH, MLS (ASCP)CM,MT(AMT) 
Education Coordinator 
UF Health Jacksonville 

Ezra Mae Magaya, BS, MLS, SH (ASCP), CLS (AMT) 
Education Coordinator 
UF Health Jacksonville 

Ann Ruby, MS, MT (ASCP), SM (ASCP) 
Education Coordinator 
UF Health Jacksonville
UF HEALTH JACKSONVILLE CREDENTIALS

UF HEALTH JACKSONVILLE

Accredited by The Joint Commission (TJC)

THE LABORATORY

Accredited by:
1. College of American Pathologists (CAP)
2. Association for the Advancement of Blood and Biotherapies (AABB)

UF HEALTH JACKSONVILLE SCHOOL OF MEDICAL LABORATORY SCIENCE

1. Seeking accreditation by National Accrediting Agency for Clinical Laboratory Sciences
2. Licensed by Florida Department of Health, Board of Clinical Laboratory Personnel – The school will be eligible for licensing when in “serious applicant status” with NAACLS
A maximum of six students are accepted each year with classes beginning the first week of January. The 45-week program is on a 40 hours per week schedule, Monday through Friday. In the first phase of the program, didactic hours are from 8:00am – 4:00pm while in the second phase, practicum, the hours are 6:30am – 3:00pm or 8:00am – 4:00pm (times may vary with each clinical rotation).

The program encompasses clinical rotations, lectures, and other various learning experiences. One-on-one practical and theoretical instruction by qualified medical laboratory scientists is delivered as each student rotates through the areas of the laboratory. Theoretical knowledge is also delivered through a lecture series with a 1:6 ratio. Students are assessed on the cognitive, psychomotor, and affective domains. To be eligible for certification as a medical laboratory scientist at the end of the practicum, a minimum passing score of 76% (C) must be maintained. The average day consists of 8 hours (plus a half hour for lunch), Monday through Friday. The first half of the year consists of didactic and student laboratory activities. In the second half of the year, each student will rotate through each area of the laboratory according to a set schedule. A master syllabus (subject to change) will be provided at the beginning of the program detailing lecture, learning experiences, and assessments with dates and times. Students are to be in their assigned clinical rotation or lectures according to their schedules.

The curriculum includes the following: Introduction to Medical Laboratory Science, Clinical Microscopy, Clinical Immunology and Serology, Molecular Diagnostics, Clinical Hematology and Hemostasis, Clinical Microbiology including Mycology, Virology and Parasitology, Clinical Chemistry, Clinical Immunohematology, and Clinical Laboratory Management and Education. Refer to course descriptions below. Students will learn pre-analytical, analytical, and post analytical aspects of laboratory testing. Discussions of the pre-analytic phase of testing will encompass collection, transport and processing of specimens. Throughout their clinical rotations students will perform testing, learn about the methodologies of the testing, troubleshooting and problem-solving techniques, interpretation and analyzing of results, quality control and quality assurance. Students will assist with reporting results, calling critical values, and other post analytical aspects throughout the clinical rotations. Students do not take the responsibility or the place of qualified staff. The students will not be encouraged or allowed to engage in repetitive tasks that add no educational value. All tasks completed by the student must under the direct supervision of a qualified medical laboratory scientist.

Students will be periodically assessed on lecture material and student and clinical laboratory activities. Assessments may be in the form of written exams and quizzes, laboratory observations, practicum exams, or competency assessments. Grades for courses will be calculated based on activity weights (please see the Pass-Fail criteria section of the handbook). Any student absent on a scheduled lecture exam day must have a valid excuse, and will be expected to take the exam the following morning.

Each rotation is self-contained. Students will receive a rotation syllabus for each area of the laboratory. Along with the syllabus students will receive objectives, references checklists of required skills, and references the schedule of assignments and assessments. Practical and written assessments are delivered for each area of the laboratory along with an evaluation of the psychomotor and affective domain. All lectures, learning experiences, and clinical rotation occur at UF Health Jacksonville Clinical Center or the School classroom with the exception of Donor Processing at Life South Community Blood Center and HLA testing at either Mayo Clinic or UF Health Gainesville.

**Introduction to Medical Laboratory Science**

Introduction to and review of the basic theories and principles of medical technology techniques used throughout the clinical laboratory to include: theory of light, photometry, and Beer’s Law; glassware - types, uses, calibration and cleaning; quality control and statistical analysis; specimen collection, handling and storage of body fluids, components, anticoagulants, and preservatives, analytical methods, reference values, standards, controls and standard curves; the microscope, centrifuge; types and grades of water and reagents; laboratory math and chemical calculations; scientific units; computational methods and conversions relevant to the clinical lab to include: solutions and expressions of concentration, dilutions, acid base, pH, and colorimetric analysis; preventative maintenance; safety; computer & LIS systems; professional ethics; antigen-antibody reactions & immunochemical methods and phlebotomy.
Clinical Urinalysis/Microscopy
This course covers the examination of body fluids. Emphasis is placed on: physical examination, chemical analysis, and microscopic sediment, examination of urine and the correlation of results in the diagnosis of disease; the investigation of the urinary system with emphasis on kidney structure and function; the physiology and clinical analysis of CSF, serous fluids, synovial fluids, and other body fluids; specimen collection, processing, quality control, LIS and safety will also be covered.

Clinical Hematology and Coagulation
Topics of study cover the examination of the cellular and fluid components of blood and body fluids and the role they play in the diagnosis of pathological diseases in humans to include classification, mechanisms, the physiology and pathophysiology of erythrocytes, leukocytes and platelets, cellular morphology, cellular diseases, automated and manual determinations, laboratory operations, analyzer maintenance, quality control, LIS, mechanisms involved in the coagulation system, including platelet function, protein interaction and clot breakdown. Bleeding and clotting disorders as well as treatment modalities are discussed. Laboratory evaluation of the hemostatic process and the correlation of laboratory findings with disease states will be emphasized.

Clinical Chemistry
A comprehensive study of the theory and principles of modern manual and instrumental techniques as applied to qualitative and quantitative analysis of body fluids. Emphasis is placed on: endocrinology; enzymology; toxicology; phlebotomy; pH and acid-base balance; electrolytes and water-balance; cardiac function; intestinal and pancreatic function; liver function; carbohydrates; proteins, non-protein nitrogen compounds; lipids; endocrinology; tumor markers; toxicology; therapeutic drug monitoring; vitamins; iron; hemoglobin and hemoglobin derivatives; blood gases; gastric analysis; amniotic fluid analysis. Also examined are: the basic principles of metabolism; biochemical status as related to health and disease; method evaluation; statistical treatment of data, quality control, LIS and safety.

Clinical Microbiology
This course is a comprehensive study of the microbial species that cause human disease. This course examines pathogenic bacteria, mycobacteria, parasites, viruses and fungi of humans in relation to pathogenesis, epidemiology, clinical manifestations, and treatment. Technical aspects of the course cover specimen collection; handling and transport; media composition and utilization; culture, isolation and identification methods; non-culture methods and automation, quality control methods, laboratory safety and quality assurance. Practical laboratory instruction covers bacteriology and mycology isolation techniques and identification methods and parasitology identification methods.

Clinical Immunology and Serology
Immunological and serological testing and correlation of test results with disease states in humans to include: autoimmune disease; gammopathies; immunodeficiency disease; hypersensitivity; immunochrometry; hepatitis; rubella; rheumatoid arthritis; syphilis and infectious mononucleosis. Pregnancy and beta HCG; febrile and heterophile antibodies; ASO; CRP and cold agglutinins are also investigated. Emphasis is placed upon the theory of the immune and cellular response; structure and function of immunoglobulins; antigens and antibodies as reagents and interaction of antigens and antibodies. The course also provides principles of current clinical techniques, methodologies and instrumentation, result interpretation and clinical application, quality control, LIS and safety.

Immunohematology
Application of the principles and techniques of blood banking in a hospital setting. The scope of this course includes: history of transfusions; genetics and biology of red cell antigen systems; donor selection; blood component preparation; the ABO, Rh, Kell and other blood group systems; the HLA system; compatibility testing; antibody identification and titration; antiglobulin testing; transfusion therapy; transfusion reactions; case histories and problem solving. Technical aspects include routine and special testing techniques as well as quality control, LIS and safety.

Management and Educational Methods
The basic principles and processes of management are discussed with emphasis placed upon: fiscal management to include budgeting, workload, and cost containment, quality assurance and quality control, personnel management; regulatory agencies and medical-legal aspects of laboratory medicine; computer & LIS systems and safety. Also discussed, are principles of learning in terms of the cognitive style. Specific applications are made to the development of instructional strategies to include: the preparation of objectives, lesson plans and examinations; the use of audiovisual and hand-out material; presentation, critique and evaluation and the administration of examinations.
Molecular Diagnostics
This course offers an overview of molecular based principles, techniques and applications for an array of nucleic acid amplification, signal amplification, and nucleic acid sequence-based testing. Lectures cover nucleic acid chemistry as well as structure and function.

**DIDACTIC AND CLINICAL CURRICULUM**

The program provides instruction and didactic assignments in accordance with a standardized schedule. The program reserves the right to modify the schedule when unforeseen circumstances arise. In the first half of the program, students receive formal classroom lectures and student mock laboratory activities. During the 2nd half of the program, students rotate through the Clinical Laboratory, learning “at the bench” typically one-on-one with their clinical instructor. Approximate times for formal classroom lecture, mock laboratory activities and clinical rotations are as follows:

<table>
<thead>
<tr>
<th>Program Course/Schedule</th>
<th>Clinical Rotation Length</th>
<th>Student Laboratory Hours</th>
<th>Classroom Lecture Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry (Manual, Automated, and Special)</td>
<td>4 weeks (160 hrs)</td>
<td>10 hours</td>
<td>36 hours</td>
</tr>
<tr>
<td>Microbiology (Bacteriology, Parasitology, Mycology, Virology)</td>
<td>5 weeks (200 hrs)</td>
<td>96 hours</td>
<td>72 hours</td>
</tr>
<tr>
<td>Molecular (Microbiology)</td>
<td>1 week (40 hrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urinalysis/Clinical Microscopy</td>
<td>1 week (40 hrs)</td>
<td>15 hours</td>
<td>15 hours</td>
</tr>
<tr>
<td>Immunohematology</td>
<td>5 weeks (200 hrs)</td>
<td>30 hours</td>
<td>30 hours</td>
</tr>
<tr>
<td>Donor Processing</td>
<td>1 days (8 hrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hematology/Coagulation/Body Fluids</td>
<td>5 weeks (200 hrs)</td>
<td>51 hours</td>
<td>36 hours</td>
</tr>
<tr>
<td>HLA</td>
<td>1 day (8 hrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow Cytometry/Bone Marrows</td>
<td>2 days (16 hrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular (Pathology)</td>
<td>2 days (16 hrs)</td>
<td></td>
<td>6 hours</td>
</tr>
<tr>
<td>Point of Care</td>
<td>1 days (8 hrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serology/Immunology</td>
<td>1 week (40 hrs)</td>
<td>12 hours</td>
<td>18 hours</td>
</tr>
<tr>
<td>Management and Educational Methods</td>
<td></td>
<td></td>
<td>20 hours</td>
</tr>
<tr>
<td>Seminar</td>
<td>1 week (40 hrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Medical Laboratory Science</td>
<td></td>
<td></td>
<td>10 hours</td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>1 week (40 hrs)</td>
<td>10 hrs</td>
<td>5 hours</td>
</tr>
<tr>
<td>Laboratory Math</td>
<td></td>
<td>n/a</td>
<td>4 hours</td>
</tr>
<tr>
<td>Reviews and Final Exams</td>
<td></td>
<td>n/a</td>
<td>96 hours</td>
</tr>
<tr>
<td>Total</td>
<td>25 weeks/1016 hours</td>
<td>226 hours</td>
<td>348.00 hours</td>
</tr>
</tbody>
</table>
APPENDIX

APPENDIX 1:  
A. General Education Objectives
   1) The general educational objectives of UF Health Jacksonville School of Medical Laboratory Science are to provide the Medical Laboratory Science students with the following capabilities upon graduation:
   a. ability to perform at the level expected for certification as a Medical Laboratory Scientist by the Board of Registry of the American Society of Clinical Pathologists, and for licensure as a Clinical Medical Technologist by the State of Florida
   b. ability to satisfactorily perform all common analytical procedures done in the clinical laboratories
   c. demonstrates a working knowledge of quality assurance and quality control terms, calculations and application to maintain accuracy and precision
   d. ability to set up and evaluate new procedures from written protocols and to modify existing procedures
   e. ability to recognize problems in the laboratory, identify their causes and initiate solutions
   f. ability to make basic interpretations of test results based on acquired knowledge of pathophysiology and disease processes
   g. demonstrates knowledge of the theories and principals involved in clinical laboratory tests
   h. exercises due care and responsibility in carrying out his/her duties and will observe commonly recognized medical ethics
   i. ability to perform satisfactorily in any hospital clinical laboratory with a minimum amount of review
   j. recognizes the importance of, and participate in, continuing education programs
   k. demonstrates proper procedures for collection and processing biological specimens
   l. applies the principle of educational methodology, supervision and management in leading supportive personnel and peers in their acquisition of knowledge, skills and attitudes
   m. ability to perform preventive and corrective maintenance on equipment and instruments as well as identifying appropriate sources of error
   n. ability to integrate and relate data from the various areas of the laboratory
   o. observes Standard Precautions and use appropriate protective barriers to ensure his/her safety and the safety of others

B. Specific career-entry competencies to be achieved upon completion of the program are described in the departmental and lecture series objectives
<table>
<thead>
<tr>
<th>PHYSICAL DEMANDS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant; several times per day or more:</td>
</tr>
<tr>
<td>Strength - sedentary (to 10 lbs.)</td>
</tr>
<tr>
<td>Standing</td>
</tr>
<tr>
<td>Walking, Flat</td>
</tr>
<tr>
<td>Carrying</td>
</tr>
<tr>
<td>Reaching - Below Shoulder</td>
</tr>
<tr>
<td>Grasp/Release</td>
</tr>
<tr>
<td>Fingering</td>
</tr>
<tr>
<td>Repetitive Motion - Wrist/Hand</td>
</tr>
<tr>
<td>Frequent; daily:</td>
</tr>
<tr>
<td>Sitting</td>
</tr>
<tr>
<td>Lifting from Floor</td>
</tr>
<tr>
<td>Lifting from Table</td>
</tr>
<tr>
<td>Lifting Overhead</td>
</tr>
<tr>
<td>Climbing Stairs</td>
</tr>
<tr>
<td>Stooping</td>
</tr>
<tr>
<td>Crouching/Squatting</td>
</tr>
<tr>
<td>Reaching - at Shoulder</td>
</tr>
<tr>
<td>Reaching - above Shoulder</td>
</tr>
<tr>
<td>Twisting/Turning</td>
</tr>
<tr>
<td>Pushing</td>
</tr>
<tr>
<td>Pulling</td>
</tr>
<tr>
<td>Occasional; 2-4 times per week:</td>
</tr>
<tr>
<td>Strength - Light (to 20 lbs.)</td>
</tr>
<tr>
<td>Strength - Medium (to 50 lbs.)</td>
</tr>
<tr>
<td>Repetitive Motion - elbow</td>
</tr>
<tr>
<td>Very Infrequent; 1-2 times per week or less:</td>
</tr>
<tr>
<td>Strength - Heavy (to 100 lbs.)</td>
</tr>
<tr>
<td>Strength - Very Heavy (100+)</td>
</tr>
<tr>
<td>Repetitive Motion – Knees</td>
</tr>
<tr>
<td>Repetitive Motion – Back</td>
</tr>
<tr>
<td>Walking - Uneven</td>
</tr>
<tr>
<td>Climbing Ladder</td>
</tr>
<tr>
<td>Kneeling</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COGNITIVE DEMANDS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant; several times per day or more:</td>
</tr>
<tr>
<td>Reading</td>
</tr>
<tr>
<td>Writing</td>
</tr>
<tr>
<td>Accuracy/Precision</td>
</tr>
<tr>
<td>Short Term Memory</td>
</tr>
<tr>
<td>Long Term Memory</td>
</tr>
<tr>
<td>Transfer of Knowledge to Unique Situations</td>
</tr>
<tr>
<td>Sequencing</td>
</tr>
<tr>
<td>Problem Solving</td>
</tr>
<tr>
<td>Attention - Duration</td>
</tr>
<tr>
<td>Social Interaction</td>
</tr>
<tr>
<td>Self-Control</td>
</tr>
<tr>
<td>Frequent, daily:</td>
</tr>
<tr>
<td>Simple Arithmetic</td>
</tr>
<tr>
<td>Weighing/Measuring Attention</td>
</tr>
<tr>
<td>Concentration</td>
</tr>
<tr>
<td>Work that is Highly Structured/Directed</td>
</tr>
<tr>
<td>Work that is Loosely Structured/Directed</td>
</tr>
<tr>
<td>Concurrent Performance of Multiple Tasks</td>
</tr>
<tr>
<td>Self-Expression</td>
</tr>
<tr>
<td>Autonomy</td>
</tr>
<tr>
<td>Occasional; 2-4 times per week:</td>
</tr>
<tr>
<td>Influencing Others</td>
</tr>
<tr>
<td>Very Infrequent; 1-2 times per week or less:</td>
</tr>
<tr>
<td>Mathematics</td>
</tr>
<tr>
<td>Directing Others</td>
</tr>
<tr>
<td>Evaluating the Performance of Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENVIRONMENTAL DEMANDS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant; several times per day or more:</td>
</tr>
<tr>
<td>Works with Others</td>
</tr>
<tr>
<td>Works under Time Constraints</td>
</tr>
<tr>
<td>Hazards - Biological</td>
</tr>
<tr>
<td>Use of Tools</td>
</tr>
<tr>
<td>Use of Machinery/Equipment</td>
</tr>
<tr>
<td>Frequent; daily:</td>
</tr>
<tr>
<td>Works Alone</td>
</tr>
<tr>
<td>Customer/Public Contact</td>
</tr>
<tr>
<td>Hazards - Electrical</td>
</tr>
<tr>
<td>Occasional; 2-4 times per week:</td>
</tr>
<tr>
<td>Exposure - Dusts</td>
</tr>
<tr>
<td>Hazards - Mechanical</td>
</tr>
<tr>
<td>Hazards - Chemical</td>
</tr>
<tr>
<td>Very Infrequent; 1-2 times per week or less:</td>
</tr>
<tr>
<td>Exposure - Weather</td>
</tr>
<tr>
<td>Exposure - Extreme Heat</td>
</tr>
<tr>
<td>Exposure - Extreme Cold</td>
</tr>
<tr>
<td>Exposure - Humidity/Wetness</td>
</tr>
<tr>
<td>Exposure - Extreme Noise</td>
</tr>
<tr>
<td>Exposure - Noxious Odors Exposure - Gasses</td>
</tr>
<tr>
<td>Vibration</td>
</tr>
<tr>
<td>Hazards - Radiation</td>
</tr>
<tr>
<td>Driving a Motorized Vehicle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENSORY DEMANDS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant; several times per day or more:</td>
</tr>
<tr>
<td>Talking</td>
</tr>
<tr>
<td>Hearing</td>
</tr>
<tr>
<td>Seeing - Near</td>
</tr>
<tr>
<td>Seeing - Depth</td>
</tr>
<tr>
<td>Seeing - Color</td>
</tr>
<tr>
<td>Seeing - Field</td>
</tr>
<tr>
<td>Frequent; daily:</td>
</tr>
<tr>
<td>Feeling</td>
</tr>
<tr>
<td>Occasional; 2-4 times per week:</td>
</tr>
<tr>
<td>Seeing - Far</td>
</tr>
<tr>
<td>Very Infrequent; 1-2 times per week or less:</td>
</tr>
<tr>
<td>Taste/Smell</td>
</tr>
</tbody>
</table>
APPENDIX 3: ESSENTIAL FUNCTION DEFINITIONS

PHYSICAL DEMANDS
Strength: Amount of lifting or carrying of objects, determined by weight. Sedentary: lifting 10 lbs. occasionally, and/or negligible amounts frequently. Light: lifting up to 20 lbs., with frequent lifting and/or carrying objects weighing up to 10 lbs. Medium: Lifting up to 50 lbs., with frequent lifting and/or carrying objects weighing up to 25 lbs. Heavy: lifting up to 100 lbs., with frequent lifting and/or carrying objects weighing 50 lbs. or more.

Standing: remains upright on one’s feet at a work station without moving about.
Walking: requires moving about on foot on even or uneven terrain.
Sitting: remains in the normal seated position.
Lifting: raises or lowers objects from one place to another, at varying heights while remaining in a stationary position.
Carrying: transports objects from one place to another using arms and/or shoulders.
Climbing: ascending and/or descending stairs or ladders.
Stooping: bends the body downward and forward from the waist.
Kneeling: bends at the knees so as to come to rest on one’s knee(s).
Crouching/Squatting: bends the body downward and forward by bending the legs (may also bend spine).
Reaching: extends the arms up, down, or forward toward an object.
Grasp/Release: seizes, holds, and lets go of objects.
Fingering: picks, pinches, or pokes objects for such activities as fine object manipulation, writing, keying, typing, or sewing.
Twisting/Turning: rotates at the waist while lower body remains stationary.
Pushing: exerts force upon an object causing the object to move away.
Pulling: exerts force upon an object causing the object to move toward one.
Repetitive Motions: frequent movement of a body part in rapid, repetitive fashion.

SENSORY DEMANDS
Feeling: interprets touch, sensing textures, shapes, size, temperatures, and pain through skin contact.
Talking: expresses or exchanges ideas through words.
Hearing: interprets sounds, locates source of sounds, and discriminates between important and background sound.
Seeing: perceives the nature of objects by the eye.
   Near: clarity of vision at 20 inches or less
   Far: clarity of vision at 20 feet or more
   Depth: judges distances between objects
   Color: identifies and distinguishes color
   Field: area that can be seen up, down, right and left when the eye is stationary.
Taste/Smell: interprets tastes and odors.

ENVIRONMENTAL DEMANDS
Works Alone: does not require interaction with others to complete tasks.
Works with Others: requires interaction with co-workers to complete tasks.
Customer/Public Contact: requires interaction with customers and/or the public to get the job done. Works under Time Constraints: plans and organizes work tasks to complete assignments within designated time frames.
Exposure to Weather: works outdoors, and is subject to weather conditions such as heat, cold, rain, snow, sleet, and wind which may change at any time.
Exposure to Extreme Heat: temperatures, indoors or outside that are sufficiently high enough to cause discomfort.
Exposure to Extreme Cold: temperatures, indoors or outside that are sufficiently low enough to cause discomfort.
Exposure to Humidity/Wetness: contact with water or atmospheric conditions with moisture content sufficient to cause discomfort.
Exposure to Extreme Noise: constant or intermittent sound that is sufficiently loud to cause discomfort or possible hearing loss.
Exposure to Noxious Odors: smells sufficient to cause discomfort.
Exposure to Dusts: solid particles generated by handling, crushing, grinding, rapid impact, detonation, or decrepitating of organic or inorganic materials sufficient to irritate eyes, skin, lungs or other organs.
Exposure to Gases: normally formless liquids which occupy the space of enclosure which may be harmful if inhaled in sufficient quantity.
Vibration: rapid, short, repetitive motion (oscillation), which, if endured repeatedly day after day, can cause bodily harm.
Hazards: conditions or situations in which there is the potential of danger to life, limb, health, or bodily injury, including exposure to mechanical, electrical, radiation, chemical, or biological agents.
Use of Tools: use of objects that can be held in the hand for the purpose of completing a task.

Use of Machinery/Equipment: use of mechanical objects that require training, manual dexterity, safety precautions, and attentiveness to operate. This includes computers, vacuum cleaners, drill presses, ovens, copiers, and other objects that
are larger than one's hands.
Driving a Motorized Vehicle: operates an automobile, truck, motor scooter, riding lawnmower, or other vehicle on hospital property and/or public roads.

COGNITIVE DEMANDS
Simple Arithmetic: addition, subtraction, multiplication and division.
Mathematics: algebra, trigonometry and/or calculus.
Reading: reads, comprehends and retains materials written at a 6th grade level or higher.
Writing: puts words and symbols down on paper in a meaningful way, such that other people can understand the message.
Accuracy/Precision: performs tasks without error, consistently.
Weighing/Measuring: uses devices and tools to determine the volume, weight, height or mass of objects, liquids, gasses, or living things.
Short Term Memory: accurately remembers things that occurred in the last 5-30 minutes, including events, written or oral material, and tasks.
Long Term Memory: remembers things that happened more than 30 minutes ago, including events, written and oral material, and tasks that occurred days, weeks or months ago.
Transfer of Knowledge to Unique Situations: applies one’s knowledge of task performance and behavior to new and different situations.
Sequencing: places information, concepts, and actions in order.
Problem Solving: recognizes a problem, defines a problem, identifies alternative plans, selects a plan, organizes the steps in the plan, and evaluates the outcome.
Attentiveness - Duration: maintains concentration on a task over time.
Attentiveness - Concentration: intensity with which one is focused on a particular task.
Directing Others: plans and organizes the work of others, assigns tasks to others, and follows up on the activities of others.
Work that is Highly Structured/Directed: directions for completing assignments are very specific and leave little room for deviation from the routine. Close supervision is provided.
Work that is Loosely Structured/Directed: directions for completing assignments are not very specific, leaving room for variation based on the needs of the situation at hand. Supervision is available, however one is encouraged to use one’s best judgement to determine the course of one’s activity.
Influencing Others: uses one’s reasoning, and persuasive abilities to change the behavior of others.
Evaluating the Performance of Others: assesses the work of others and provides feedback to them such that they are able to modify their work as needed.
Concurrent Performance of Multiple Tasks: does several things at the same time, with speed and accuracy.
Self-Expression: uses a variety of skills to express one’s thoughts, feelings and needs.
Autonomy: works independently, takes initiative and responsibility for the work that gets done.
Social Interaction: uses manners, personal space, eye contact, gestures, active listening, and self-expression appropriate to the situation.
Self-Control: modulates and modifies one’s own behavior in response to situational needs, demands, and constraints.

APPENDIX 4: Florida Statute and Disciplinary Action
(1) The following acts constitute grounds for denial of a license or disciplinary action, as specified in s. 456.072.
(2): (a) Attempting to obtain, obtaining, or renewing a license or registration under this part by bribery, by fraudulent misrepresentation, or through an error of the department or the board.
(b) Engaging in or attempting to engage in, or representing herself or himself as entitled to perform, any clinical laboratory procedure or category of procedures not authorized pursuant to her or his license.
(c) Demonstrating incompetence or making consistent errors in the performance of clinical laboratory examinations or procedures or erroneous reporting.
(d) Performing a test and rendering a report thereon to a person not authorized by law to receive such services.
(e) Has been convicted or found guilty of, or entered a plea of nolo contendere to, regardless of adjudication, a crime in any jurisdiction which directly relates to the activities of clinical laboratory personnel or involves moral turpitude or fraudulent or dishonest dealing. The record of a conviction certified or authenticated in such form as to be admissible in evidence under the laws of the state shall be admissible as prima facie evidence of such guilt.
(f) Having been adjudged mentally or physically incompetent.
(g) Aiding and abetting in the violation of any provision of this part or the rules adopted hereunder.
(h) Reporting a test result when no laboratory test was performed on a clinical specimen.
(i) Knowingly advertising false services or credentials.
(j) Having a license revoked, suspended, or otherwise acted against, including the denial of licensure, by the licensing authority of another jurisdiction. The licensing authority’s acceptance of a relinquishment of a license, stipulation, consent order, or other settlement, offered in response to or in anticipation of the filing of administrative charges against the licensee, shall be construed as action against the licensee.
(k) Failing to report to the board, in writing, within 30 days that an action under paragraph (e), paragraph (f), or paragraph (j) has been taken against the licensee or one’s license to practice as clinical laboratory personnel in another state, territory, country, or other jurisdiction.
(l) Being unable to perform or report clinical laboratory examinations with reasonable skill and safety to patients by reason of
illness or use of alcohol, drugs, narcotics, chemicals, or any other type of material or as a result of any mental or physical condition. In enforcing this paragraph, the department shall have, upon a finding of the State Surgeon General or his or her designee that probable cause exists to believe that the licensee is unable to practice because of the reasons stated in this paragraph, the authority to issue an order to compel a licensee to submit to a mental or physical examination by physicians designated by the department. If the licensee refuses to comply with such order, the department’s order directing such examination may be enforced by filing a petition for enforcement in the circuit court where the licensee resides or does business. The department shall be entitled to the summary procedure provided in s. 51.011. A licensee affected under this paragraph shall at reasonable intervals be afforded an opportunity to demonstrate that he or she can resume competent practice with reasonable skill and safety to patients.

(m) Delegating professional responsibilities to a person when the licensee delegating such responsibilities knows, or has reason to know, that such person is not qualified by training, experience, or licensure to perform them.

(n) Violating a previous order of the board entered in a disciplinary proceeding.

(o) Failing to report to the department a person or other licensee who the licensee knows is in violation of this chapter or the rules of the department or board adopted hereunder. However, a person or other licensee who the licensee knows is unable to perform or report on clinical laboratory examinations with reasonable skill and safety to patients by reason of illness or use of alcohol, drugs, narcotics, chemicals, or any other type of material, or as a result of a mental or physical condition, may be reported to a consultant operating an impaired practitioner program as described in s. 456.076 rather than to the department.

(p) Making or filing a report which the licensee knows to be false, intentionally or negligently failing to file a report or record required by state or federal law, willfully impeding or obstructing such filing or inducing another person to do so, including, but not limited to, impeding an agent of the state from obtaining a report or record for investigative purposes. Such reports or records shall include only those generated in the capacity as a licensed clinical laboratory personnel.

(q) Paying or receiving any commission, bonus, kickback, or rebate, or engaging in any split-fee arrangement in any form whatsoever with a physician, organization, agency, or person, either directly or indirectly for patients referred to providers of health care goods and services including, but not limited to, hospitals, nursing homes, clinical laboratories, ambulatory surgical centers, or pharmacies. The provisions of this paragraph shall not be construed to prevent a clinical laboratory professional from receiving a fee for professional consultation services.

(r) Exercising influence on a patient or client in such a manner as to exploit the patient or client for the financial gain of the licensee or other third party, which shall include, but not be limited to, the promoting, selling, or withholding of services, goods, appliances, referrals, or drugs.

(s) Practicing or offering to practice beyond the scope permitted by law or rule, or accepting or performing professional services or responsibilities which the licensee knows or has reason to know that he or she is not competent to perform.

(t) Misrepresenting or concealing a material fact at any time during any phase of the licensing, investigative, or disciplinary process, procedure, or proceeding.

(u) Improperly interfering with an investigation or any disciplinary proceeding.

(v) Engaging in or attempting to engage in sexual misconduct, causing undue embarrassment or using disparaging language or language of a sexual nature towards a patient, exploiting superior/subordinate, professional/patient, instructor/student relationships for personal gain, sexual gratification, or advantage.

(w) Violating any provision of this chapter or chapter 456, or any rules adopted pursuant thereto.

(2) The board may enter an order denying licensure or imposing any of the penalties in s. 456.072(2) against any applicant for licensure or licensee who is found guilty of violating any provision of subsection (1) of this section or who is found guilty of violating any provision of s. 456.072(1).

(3) In determining the amount of the fine to be levied for a violation, as provided in subsection (1), the following factors shall be considered: (a) The severity of the violation, including the probability that death or serious harm to the health or safety of any person will result or has resulted, the severity of the actual or potential harm, and the extent to which the provisions of this part were violated.

(b) Actions taken by the licensee to correct the violation or to remedy complaints.

(c) Any previous violation by the licensee.

(d) The financial benefit to the licensee of committing or continuing the violation.