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Part I: Introduction

A. Welcome!

Welcome to the Clinical Laboratory Science (CLS) Programs! You're beginning an interesting and exciting career. More than 70% of the decisions made by doctors are based on the results of laboratory testing. You'll be doing important work, whether you are employed by a hospital laboratory, a blood donor center, a research laboratory, or in industry.

In the Medical Laboratory Technician (MLT) and Medical Laboratory Science (MLS) programs, you’ll learn how to perform and interpret the results of tests on the samples that were collected by phlebotomists and others (and sometimes, collected by you)! You'll learn how to provide blood products for patients needing transfusion, how to identify which bacteria and other microorganisms are causing infection, how to identify the blood cells that cause leukemia, and how to detect and measure chemicals in the blood such as cholesterol, drugs, and hormones. Then you’ll be assigned to a clinical affiliate for more practice in an actual clinical laboratory.

These are not easy programs – you'll spend long hours in classes and labs. But you’ll be joining some of the best students in the university. You'll make friends among both students and faculty. We all work together to help you succeed.

Although you’ll be assigned to one academic advisor when you enter the professional phase of the program, feel free to ask any of the program faculty for help or information at any time. We all want you to learn, prosper, and thrive at Ferris and in the clinical laboratory. This handbook provides some of the information you need. Refer to it often. The handbook is updated every year.

B. Purpose of This Handbook

The CLS Student Handbook provides you with information about the policies of the Clinical Laboratory Science programs. The target audience is current and prospective students in Clinical Laboratory Sciences at Ferris State University.

This handbook does not replace the Ferris Code of Student Community Standards. Our Handbook serves as an extra source of information specific to the CLS programs. We recommend that you refer to the Ferris State University web site for the most current information throughout your course of study at Ferris State University. You can find the online version of the University’s Code of Community Standards here.

C. What’s New in This Handbook?

The College of Health Professions has been restructured. The MLS and MLT programs are now part of the Diagnostic, Laboratory, and Therapeutic Sciences (DLTS) Department.
D. Organization

1. College of Health Professions

The CLS programs are in the College of Health Professions (CHP). Figure 1 shows the organization of the College of Health Professions, so you can better understand the structure and programming of the College of which your chosen program is a part.

![Figure 1 - CHP Structure](image)

2. Department of Diagnostic, Laboratory, and Therapeutic Sciences (DLTS)

The Department of Laboratory and Therapeutic Sciences (DLTS) houses the MLS and MLT programs. The Department Chair is Michelle Weemaes. Mrs. Weemaes is responsible for overall administration of the MLS and MLT programs. Her office is VFS 405A, telephone is
3. Clinical Laboratory Science Programs

Mr. Daniel P. deRegnier is the CLS Program Coordinator. Mr. deRegnier is responsible for many program activities including accreditation and recruiting and retention of students. Ms. Sandra Cook is the Clinical Coordinator. Students should consult with her regarding their clinical experience (internship).

There are three full time faculty, occasional part – time faculty, and one laboratory coordinator employed in the Clinical Laboratory Science Programs. Here is a summary of each full – time person’s responsibilities:

**Sandra Cook MS, MT(ASCP)**
Office: VFS 427  
Telephone: 231.591.2314  
E-mail: SandraCook@ferris.edu  
Instruction in: Hematology, Body Fluids, Hemostasis, Management, and Clinical Coordination.

**Daniel P. deRegnier MS, MT(ASCP)**
Office: VFS 418  
Telephone: 231.591.2327  
E-mail: DanieldeRegnier@ferris.edu  
Instruction in: Diagnostic Microbiology, Basic and Clinical Immunology, Medical Virology, Parasitology, Mycology  
Program Coordinator

**Sarah Pelton, MS, MLS(ASCP)\(^{CM}\), SBB (ASCP)\(^{CM}\)**
Office: VFS 406  
Telephone: 231.591.2207  
E-mail: SarahPelton@ferris.edu  
Instruction in: Clinical Chemistry, Transfusion Medicine

**Lisa Smith, MLS(ASCP)\(^{CM}\)**
Office: VFS 423 B  
Telephone: 231.591.2364  
Lab Coordinator

4. Program Accreditation Information
The MLS and MLT programs at Ferris State University are fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). NAACLS can be contacted as follows:

NAACLS  
5600 N. River Road Suite 720
E. Overview of the Programs

Our Goals:

a. To prepare graduates for entry-level employment in a variety of settings.
b. To clearly define what is expected of students at all levels of the program, to make these expectations clear to all students, and to help students fulfill those expectations.
c. To incorporate appropriate liberal arts, science, and Health Professions core courses into the curriculum and to educate professionals who are aware of the needs and values of a changing world.
d. To provide evaluation mechanisms which recognize individual competencies and allow for advanced placement where appropriate.
e. To provide the opportunity for worthwhile clinical experiences for all qualified students.

Our Mission

The mission of the Clinical Laboratory Science programs at Ferris State University is to prepare graduates with the knowledge, skills, and professional behaviors needed to function effectively in a wide range of laboratory settings.

The Clinical Laboratory Sciences Programs at Ferris State University include an associate degree and a baccalaureate degree program.

The MLT Program combines specific courses in biology, chemistry, mathematics, CHP core courses, general education courses required by the university, along with courses specific to the discipline. These courses may be completed by students within the CLS programs in the College of Health Professions, or by students transferring from other programs at Ferris or from other colleges or universities. The MLS Program further includes statistics, management, advanced courses in natural sciences, and advanced courses specific to the discipline. The MLT program culminates in a 14-week clinical experience (internship) at an affiliated medical laboratory, while the MLS program culminates in an 18-week clinical experience. Students can complete the MLS program via two routes:
Traditional: A student completes all required courses on campus and then finishes the program with clinical experience (internship).

MLT to MLS progression: A student may complete an associate degree MLT program and then enter the MLS program to gain the advanced knowledge and skills for the baccalaureate degree.

F. Program Check Sheets and Comparison Chart

The next pages include program check sheets for the MLT and MLS programs and a comparison of the programs.

1. Medical Laboratory Technology Associate in Applied Science Degree
   - Check sheet for students enrolled prior to 2017
   - Check sheet for students enrolled 2017 and later

2. Medical Laboratory Science – Bachelor of Science Degree
   - Check sheet for student enrolled prior to 2017
   - Check sheet for students enrolled 2017 and later
## Clinical Laboratory Science Programs Comparison Chart

<table>
<thead>
<tr>
<th>Arts and Sciences Courses</th>
<th>AAS in MLT</th>
<th>BS in MLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 103 Biological Concepts</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>BIOL 108 or 286 Medical Microbiology or General Microbiology</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>BIOL 205 Human Anatomy and Physiology</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>BIOL 300 Pathophysiology</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>CHEM 114 Introduction to General Chemistry</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CHEM 214 Fundamentals of Organic Chemistry</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CHEM 324 Fundamentals of Biochemistry</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>MATH 117 Contemporary Mathematics</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ENGL 150 English 1</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ENGL 250 English 2</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ENGL 311 Advanced Technical Writing</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>COMM 221 Small Group Decision Making</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cultural Competency Elective</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cultural Competency Elective</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Cultural Competency Elective</td>
<td>(200 level or above)</td>
<td>No</td>
</tr>
<tr>
<td>Self and Society Elective</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Self and Society Elective</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Self and Society Elective</td>
<td>(200 level or above)</td>
<td>No</td>
</tr>
<tr>
<td>Foundation Competency: Collaboration</td>
<td>COHP 350, CLLS 494</td>
<td>No</td>
</tr>
<tr>
<td>Foundation Competency: Problem Solving</td>
<td>COHP 350, COHP 450, CLLS 456</td>
<td>No</td>
</tr>
<tr>
<td>CHP Core Courses</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>COHP 100 Orientation to Medical Vocabulary</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>COHP 101 The U.S. Health Care System</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>COHP 102 Safety in Health Care</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>COHP 350 Statistics in Health Care</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>COHP 450 Evidence-Based Health Care Practice</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Part II: General Program Policies

#### A. Admission Requirements

Students intending to enter the professional phase of the MLT or MLS programs will be admitted to Ferris with the designation of AAS-AHS and either the MLT or MLS concentration. To qualify for the professional phase of the program,
students must have a cumulative GPA of 2.50 or higher and must have completed the science courses that are prerequisites for CLLS courses with 2XX and higher numbers. Courses required include BIOL 108 or 286, BIOL 205, and CHEM 114 AND 214. A grade of C or better is required in BIOL 108/286, BIOL 205 and CHEM 114 and 214. Applications for the professional phase of the program will be accepted in January of each year. The applications are posted on the CHP website. The professional phase of the MLT and MLS programs begin in May of each year.

While you are qualifying for the professional phase of the programs at Ferris, your academic advisor will be Ms. Linda Kuk or Mr. Austin Freshour. You can contact Ms. Kuk at 231.591.2478. Her office is VFS 210B. Mr. Freshour may be reached at 231.591.2243. The pre-advisors schedule at least two advising sessions for prospective MLT and MLS students each term. When you attend either one of those sessions, you can get your questions answered, get your advising holds removed, and MOST IMPORTANTLY, sign up for science classes and be sure you will get a seat in the classes you need the following term. Watch for notices about these crucial meetings!

You can find information about Procedures for Admission to the Professional Phase for Quota Programs and Qualifications and Applications for the Professional Sequence here. Links from that site will lead you step-by-step through the qualification and application processes.

Due to scheduling and faculty limitations, enrollment in courses with CLLS 2XX numbers and higher is limited to 28 students per academic year. See your academic advisor if you have questions.

If more students apply for admission to the professional phase of the program than we have space for, we will accept 28 qualified students. Qualified students are those who meet admission criteria. If there are more than 28, we will accept the first 28 students based on the date the student completed all of the qualifying courses. We will inform the students IN WRITING so that they can choose to be put on a waiting list (all the students who are accepted may not show up, creating additional spaces). Meanwhile, these students can take on-campus courses and apply the next year. Throughout the process, we will keep all students informed of our progress in finding seats for everyone who is eligible.

B. Advanced Placement/Proficiency Exams

Ferris State University cooperates in both the Advanced Placement (AP) and College Level Examination Program (CLEP) offered by the College Board. We encourage you to write these examinations when you first enroll in the University. Many students receive credit from these programs, particularly in social awareness, cultural enrichment, English and mathematics.

Credit may also be granted for work completed through the United States Armed Forces Institute, if that work is applicable to your curriculum. In addition, if you have become proficient in a particular area without formal study of the subject,
you may receive credit for coursework in that area by taking and passing (a) proficiency examination(s).

Proficiency examinations in specific CLS courses will be made available by request. Because of the rapidly changing nature of the clinical laboratory sciences, specific examinations will be developed when requested, using a combination of the examinations given for the course and appropriate laboratory exercises, where applicable.

C. Credit for Applicable Work Experience

Students enrolled in CLS programs who have extensive clinical laboratory experience may be granted academic credit for some or all of that work experience. For example, students who have worked as phlebotomists may submit documentation describing and validating their work experience, listing procedures performed, and learning acquired. Upon submission of this documentation, the student MAY receive credit for CLLS 122 and/or CLLS 123.

Students wishing to receive credit for on-campus CLLS courses may apply for such credit using a portfolio. Written examinations may be required to verify that the student has acquired necessary knowledge in addition to laboratory skills.

D. Essential Requirements

This list of essential (non-academic) functions of the CLS program is provided to prospective students so that you can assess your own health and ability to complete the program successfully. You must be able to participate in course work-on and off the university campus in ways that will not endanger yourself, other students, faculty, patients, or others. When you enter the professional phase of the program, a faculty member will explain the purpose of the essential requirements, explain each category, and give you an opportunity to ask questions about the document.

Ferris State University
Essential Requirements for the Clinical Laboratory Sciences Programs

In addition to meeting published academic requirements, students must be able to meet other essential requirements in order to complete the program successfully. Students must be able to complete the program in ways that will not endanger themselves or other persons.

<table>
<thead>
<tr>
<th>Essential Requirements</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential Observational Requirements</td>
<td>Observe laboratory demonstrations in which body fluids and other biologicals are tested for their biochemical, hematological, immunological, and microbiological characteristics. Characterize the color, odor, clarity, and viscosity of body fluids, reagents, or reaction products. Use a binocular microscope to discriminate among fine structural and color differences in microscopic specimens.</td>
</tr>
</tbody>
</table>
Read and comprehend text, numbers, and graphs displayed in print, on instrument scales, or video monitors.
Observe biological samples and their labeling to assess the acceptability of samples for analysis.
Observe and describe colonial morphology of bacteria.
Observe and quantitate the degree of agglutination or other antigen-antibody reaction.

**Essential Intellectual Requirements**
Read and comprehend technical and professional materials such as textbooks, professional journals, laboratory procedures, and instructional manuals.
Apply these intellectual skills: comprehension, measurement, mathematical calculation, reasoning, integration, analysis, comparison, self-expression, and criticism.
Exercise sufficient judgment to recognize and correct performance deviations.
Apply knowledge of related sciences, including biology, chemistry, physics, and mathematics, to laboratory test procedures.
Apply knowledge to the interpretation of laboratory test results, including correlation of results with diagnoses.
Apply knowledge to the assessment of laboratory results, taking appropriate action when invalid or grossly abnormal results occur.

**Essential Communication Requirements**
Follow verbal and written instructions to perform assigned procedures correctly and independently.
Effectively and sensitively communicate with patients and others identifying and valuing cultural and religious differences.
Use appropriate terminology to instruct patients and others prior to specimen collections, adjusting communication style to meet the needs of the patient and situation.
Respect patients’ rights to privacy and confidentiality.
Communicate effectively and clearly with faculty, students, staff, and other health care professionals verbally, in writing, and/or via graphical presentations.
Use facility guidelines and legal requirements concerning methods of sending and receiving information, including test results and other patient information.
Independently prepare papers and laboratory reports, and take paper, computerized, and practical examinations.

**Essential Behavioral Requirements**
Manage time in order to prioritize and complete professional and technical tasks efficiently.
Employ intellect and exercise professional judgment effectively, seeking clarification or assistance when needed.
Accurately provide professional and technical services under the stressful conditions of the clinical laboratory, including (but not limited to): ambiguous test ordering, ambivalent interpretations, emergent demands, and a distracting environment.
Identify and operate within the scope of professional practice.
Be flexible and creative in adapting to professional and technical change.
Recognize potentially unpleasant and/or hazardous materials, equipment, and situations, and proceed safely in order to minimize risk of injury to self and others.
Support and promote the activities of fellow students, health care professionals, and health care organizations.
Promote a team approach to learning, task completion, problem solving, and patient care.
Perform honestly, compassionately, ethically, and responsibly, admitting errors and taking corrective action where appropriate.

E. ADA Accommodations

Ferris State University maintains the Office of Disabilities Services to provide accommodations for students with special needs. Disabilities Services is the campus office responsible for determining and providing requested academic accommodations for students with disabilities. A variety of support services are provided to students with documented mobility limitations, learning disabilities, hearing and visual disabilities, attention deficit disorders, psychological disabilities, and other types of disabilities. Their mission statement is:

“Educational Counseling and Disabilities Services serve students with disabilities, empowering them for self-reliance and independence while promoting equal access to educational opportunities and programs.

Disabilities Services is located within the Department of Educational Counseling and Disability Services (ECDS). The ECDS is located in the Arts and Sciences Commons (ASC) 1017. Counselors in the ECDS are available by appointment or on a walk-in basis. Call 1-800-4-FERRIS (1-800-433-7747) and ask for ext. 3057, or call (231) 591-3057.

In order for Disabilities Services to determine a student's eligibility for services, all students must complete the Intake Interview Form with the Educational Counselor for Students with Disabilities and present appropriate documentation. Different disabilities require different forms of documentation. Classroom accommodations can be made after students have met with ECDS and have presented accommodation documentation to appropriate faculty. Accommodations must be requested through the ECDS office at the beginning of each semester.

Both the university and the CLS programs are eager to help all students succeed. If you need further information concerning Disabilities Services, contact Ms. Marie Yowtz, Starr 313A, 231-591-2742. For further information on the Ferris State University Disability Policies and Services, visit the Disability Services web site.
F. Classroom Rights and Responsibilities

As a student at Ferris, you have the **RIGHT** to:

- Be treated as an adult
- Be treated with respect
- Know the instructor’s expectations for you in the class
- Know the grading scale
- Receive a syllabus, written or electronic
- Have access to all of the class policies (attendance, etc.)
- Know the instructor’s office hours are posted.
- Have access to all safety procedures.

As a student at Ferris, your **RESPONSIBILITIES** include:

- To attend class on a regular basis according to the requirements set forth in the instructor’s syllabus
- To arrive on time for class
- To come prepared for class
- To wear appropriate clothing to class
- To use appropriate language in class
- To take responsibility for your own learning
- To observe the academic honesty policies
- To respect others’ points of view, rights, and feelings

If you, as a student, fail to fulfill your classroom responsibilities, such behavior may reflect negatively on your grade in the class and/or disciplinary action may result. If you believe the instructor has failed to fulfill her/his responsibility, discuss your concerns with your instructor. Then you may use the CHP Student Complaint Policy, which outlines procedures to get your concerns heard and problems resolved. You can find the policy on the CHP website.

G. Policy on Use of Computers in the CLS Student Laboratories

There are several computers in VFS 421 and VFS 423. Some of these computers are attached to bar code label printers for the Laboratory Information System. Most of the computers are networked to a printer in VFS 423.

Since there is no student computer lab in the VFS building, there is increased student interest in using CLS computers for class assignments and other applications. Therefore, the following policies have been adopted for computer use:

All use of the CLS computers must conform to the university’s computer use and security guidelines, which are available [here](#). Unauthorized and/or inappropriate use of computers is prohibited. Such use includes, but is not limited to:
• Damaging or altering records or programs.
• Furnishing false information or invading the privacy of another user by using files, programs, or data without permission.
• Engaging in disruptive and annoying behavior.
• Engaging in any unauthorized use of, or access to computer hardware, software, accounts or passwords.
• Downloading music or other MP3 files onto CLS computers, or using these computers to download files illegally.
• Students needing computers for in – class assignments during scheduled classes have first priority, including students needing access to the laboratory information system.
• One computer in VFS 423 is reserved for instructor or work study projects, including (but not limited to):
  o Test ordering and label printing for simulated laboratory
  o Test ordering and label printing for phlebotomy classes
  o Data base maintenance for slide collections
  o Student record updates

CLS students who are not in scheduled classes MAY be allowed to use available computers during hours when the laboratories are open, if their use does not conflict with other users. Students must consult with faculty or the laboratory coordinator before using the computers in the labs.

Do NOT save files onto the CLS computers. Files that we don’t recognize will be deleted without notice. Each student has storage space on the University network which you can use to store your work. Instructions on how to access this space is available from MyFSU.

CLS printers and paper are NOT available for student use, except for printing items required for a course, during the scheduled class period.

Students must abide by the computer use policies and procedures if they choose to use these facilities.

H. Safety Policies

1. General Laboratory Safety

The first topic of your first laboratory course will be laboratory safety. You will be reminded of the need to practice safe techniques throughout the curriculum. The CLS laboratories maintain a safety manual in the laboratories. If you have specific questions about safe practices, refer to this manual or ask your instructor.

At the beginning of the program, each student is required to document BBP, HIPAA, FERPA, fire safety, active shooter, and hazard communication training using the GCN and KnowBe4courses available through FSU.
Here is a summary of general safety rules for CLS laboratories:

- Do not smoke, eat, drink, chew gum, or apply make-up in the laboratories.
- Do not put fingers, pencils, or other objects in your mouth.
- Do not store food in the laboratory, or in laboratory refrigerators or freezers.
- Wash your hands with soap and water after handling patient specimens or cultures, and before leaving the laboratory.
- When handling potentially infectious materials, wear appropriate personal protective equipment, including laboratory coat, gloves, and safety glasses.
- Never pipette by mouth. Use a mechanical pipette, or a glass pipette and rubber bulb.
- If you are working with particularly hazardous specimens or cultures, work in the biological safety cabinet.
- Use a chemical fume hood when working with volatile, caustic or toxic chemicals.
- Learn how to dispose of specimens, contaminated waste, glassware, and sharp objects. If you need to dispose of an environmentally-damaging chemical or biologic hazards consult with the laboratory coordinator before disposal.
- If you spill or drop anything, clean it up immediately. If you’re not sure HOW to clean it up, consult an instructor for guidance.
- You are responsible for the proper handling, storage, and disposal of the samples and cultures you are assigned to work on.
- When you are finished with reagents and equipment, return them to where you found them, unless instructed otherwise.
- Learn where to put glassware to be washed. Be sure to remove any markings you have made on the glassware.
- If you are handling hot glassware or other warm materials, use thermal gloves.
- Don’t take any biological or chemical materials or ANY laboratory equipment out of the laboratory without permission of your instructor.
- Turn off the incinerators in microbiology when you are finished with them.
- Personal electronic equipment is not allowed in the laboratory, including but not limited to personal MP3 players and cell phones. If such equipment is brought into the lab, we reserve the right to confiscate it for autoclaving.
- Use of smart watches in the laboratory is discouraged. There is a risk of contamination if using these devices with gloves.
- Avoid sitting on any laboratory bench or sitting with your feet propped up on the bench.
- Be careful with the laboratory chairs. They have a tendency to move out from under you.
- Put your coat, hat, backpack, cell phone and other materials that you don’t need in your locker. Bring only what you need for your laboratory session. This avoids crowding and prevents contamination of your belongings.
- Keep the books and notebooks that you need on the bench or in drawers, not on the floor.
- Open the drawers and cupboards only when you need to put something in or get something out. Close them when you’re finished.
• Push your chair under the bench when you get up.
• Clean the bench top where you are working before and after each laboratory session. Use the spray disinfectant provided. Spray the area, allow the solution to sit for 10 minutes, and wipe with paper towels.
• Report any accident or injury to an instructor, no matter how minor. If you need treatment at the Health Center, you will not be charged if you have followed proper procedures.
• Note the location of the fire extinguishers, eye wash stations, safety showers, fire blankets, first aid kits, and telephones in the laboratories. You may never need to use them, but it’s good to be prepared.
• Learn the procedures to follow in case of fire alarm, tornado warning, or other emergencies. These are posted near the main door of each laboratory.

2. Dress Code

Part of safe laboratory practice involves dressing appropriately. A full-length, fastened, fluid-impermeable laboratory coat must be worn when working in the laboratory. ANSI approved safety glasses are to be worn when working with human body fluids. Students enrolled in CLLS 123, as well as students coming into the professional phase of the MLT and MLS programs must buy a disposable laboratory coat through the University Bookstore. At the end of each semester, the coats will be collected, autoclaved, and discarded. If your coat becomes torn, badly stained, or otherwise damaged, we will dispose of the coat and you will be required to purchase another one. When your lab coat is not being worn, you should store it on an assigned hook in VFS 422. Your name should be written on your coat.

In the CLS laboratories, you are required to wear a plain black scrub top and plain black scrub pants. You must wear shoes with closed toes and heels, and you must wear socks that cover the ankle. You may wish to purchase additional sets of scrubs and keep a clean set in your locker in case your scrubs become contaminated during a laboratory session. Contaminated scrubs must be left in the laboratory until it can be sent to the laundry service provided by the University.

If your hair is long enough to interfere with performing laboratory procedures, tie it back while you are working in the laboratory. Generally, if the hair on both sides of your head is long enough to meet under your chin when you lean forward, you need to tie it back.

Students may not wear hats while working in CLS laboratories. Faculty and staff need to be able to see your face while you are working, and hats can become contaminated with blood borne pathogens and harsh chemical solutions. We will make exceptions for most forms of religious headgear, as long as it can conform to safety requirements.

Fingernails, real and artificial, must be kept trimmed and should not compromise the integrity of your nitrile or vinyl gloves.
3. Blood Borne Pathogens

Procedures for safe handling of potentially infectious materials are taught early in the first laboratory courses and are reviewed in later courses. The CLS programs will not allow you to compromise your own safety or the safety of others using the laboratories.

4. Hepatitis B Vaccination and Other Immunization Requirements

To participate in the laboratory and internship experiences in the Clinical Laboratory Science Programs, you must provide proof of Hepatitis B vaccination or antibody titer. If you decline the vaccine for Hepatitis B, you must sign a waiver acknowledging that you have been informed of the vaccine, the risks associated with not having the vaccine, and that you understand that you may change your decision and receive the vaccine. Paying for the vaccine is your responsibility.

The vaccine for protection from Hepatitis B is available at the University's Health Center at a substantial discount from what it would cost at a private physician's office. However, you may receive the vaccine from any source so long as proof of having received the vaccine is provided to the College of Health Professions.

Immunization for Hepatitis B is a very common requirement of clinical affiliates. All students in the Clinical Laboratory Science programs will come in contact with blood and other body fluids. The vaccine can provide protection to you, your colleagues, and your patients.

Meningococcal vaccines are now available that help protect against all three serogroups of meningococcal disease that are most commonly seen in the United States (serogroups B, C and Y). It is strongly recommended that you receive one of the approved vaccines.

*Some (Most)* clinical affiliates require proof of immunity to rubella, rubeola, varicella, influenza and other contagious diseases. You'll be informed of these requirements if they apply to you. If you fail to obtain the required immunizations, we may be unable to place you at a clinical site. This may delay or even prevent your graduation.

5. Chemical Hygiene

According to Michigan law, everyone has the right to know of any hazardous materials with which they may come in contact. Safety Data Sheets (SDS), with information on all chemicals with which CLS students may come in contact, are located in the VFS 422 (the "prep room"). Procedures for safe handling of laboratory chemicals are reviewed in courses. Hazardous materials used by students in the CLS laboratories
may include, but are not limited to, the materials listed in the Safety Manual.

If you are uncertain how to handle or dispose of any chemical, refer to the SDS or ask an instructor.

6. Waste Disposal and General Laboratory Tidiness

Different materials used in CLS laboratories are disposed of in different ways. We maintain separate disposal containers for paper, contaminated materials, glass, and sharps. You will learn how to dispose of materials correctly during each laboratory course. We rely on your cooperation and vigilance to prevent injury.

It is each student’s responsibility to clean up after him or herself. The CLS laboratories are used heavily every day, and nobody has time to pick up after other students. Put things away, wipe down the counters as instructed, and return equipment to where it belongs before you leave the laboratory. Take your belongings with you. If a lack of tidiness becomes an issue in the laboratory, the faculty may penalize your laboratory course grade.

7. Fire Safety

Each laboratory is equipped with a class ABC fire extinguisher and safety shower. VFS 421 also contains a fire blanket. Every hallway and room in the VFS building is equipped with fire alarms that emit audible and visible signals. Each classroom and laboratory has at least two exits.

If you find a fire, you should sound the alarm, and then proceed to the nearest exit via the safest route. DO NOT USE THE ELEVATOR. If time permits, turn off the equipment you were using, turn off the room lights, and close the door. If you are wearing gloves, you should remove and discard them as you exit. If you cannot dispose of them correctly, fold them with the contaminated sides INSIDE and put them in your lab coat pocket. Then dispose of them correctly later.

You should know that, if you pull a fire alarm in the VFS building, the Big Rapids Fire Department is summoned automatically. False alarms are NOT considered amusing events. You can be arrested for falsely setting off a fire alarm.

All CLS students and faculty should meet at the south sidewalk in front of the VFS building. Please report there so that CLS faculty can be sure that everyone has evacuated safely.
8. Tornado/Severe Weather Safety

In the event of tornado or other severe weather, the alarm will be sounded from atop the College of Business and other locations. In the VFS building, proceed immediately to the nearest hallway away from any windows. If you are the last person to leave a classroom or laboratory, turn off the lights and close the door. Remain calm, and you will receive further information.

9. Emergency Communications

The university has implemented a number of ways to communicate in case of emergency. You can sign up for Emergency Text Alerts from the University, a free service that communicates with you in case of terrorist attack, weather emergency or other incident. A pop-up window is supposed to appear on university computers that are connected to the Ferris network when information needs to be communicated to everyone quickly. There is an outdoor broadcasting system that sends voice messages over the entire campus. And an electronic messaging board is installed outside the Wheeler Pavilion, which is easily viewed from VFS 421

10. Safety in the Microbiology Laboratory

To: MLS/MLT Students  
From: Daniel P deRegnier, MS, MT(ASCP)  
RE: Diagnostic Microbiology Laboratory

Microbiology labs in the Clinical Laboratory Sciences programs at Ferris State University are operated at Biosafety Level 2 (BSL2). Personal protective equipment (lab coats, gloves, goggles, etc.) is required to work in this lab, and access to the laboratory is restricted by the instructor when work with infectious agents is in progress.

Persons who are immune-compromised (including those who are pregnant or may become pregnant) and students living with or caring for an immune-compromised individual should consult with physicians to determine the appropriate level of participation in the lab. Should your physician discern that you should not participate in this lab, please have him or her write a note stating the concerns. Alternative accommodations may be indicated, e.g. the use of a biological safety cabinet.

BSL1 and 2 agents used in the lab may include:

Bacteria

<table>
<thead>
<tr>
<th>Acinetobacter baumannii</th>
<th>Neisseria meningitidis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aeromonas hydrophila</td>
<td>Pasteurella multocida</td>
</tr>
<tr>
<td>bacteria name</td>
<td>organism name</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Aggregatibacter aphrophilus</td>
<td>Plesiomonas shigelloides</td>
</tr>
<tr>
<td>Alcaligenes faecalis</td>
<td>Prevotella melaninigenica</td>
</tr>
<tr>
<td>Bacillus cereus</td>
<td>Proteus mirabilis</td>
</tr>
<tr>
<td>Bacillus circulans</td>
<td>Proteus vulgaris</td>
</tr>
<tr>
<td>Bacillus subtilis</td>
<td>Pseudomonas aeruginosa</td>
</tr>
<tr>
<td>Bacteroides fragilis</td>
<td>Salmonella enterica serotype typhimurium</td>
</tr>
<tr>
<td>Citrobacter freundii</td>
<td>Serratia marcescens</td>
</tr>
<tr>
<td>Clostridium perfringens</td>
<td>Shigella sonnei</td>
</tr>
<tr>
<td>Corynebacterium xerosis</td>
<td>Staphylococcus aureus</td>
</tr>
<tr>
<td>Enterobacter cloacae</td>
<td>Staphylococcus epidermidis</td>
</tr>
<tr>
<td>Enterococcus faecium</td>
<td>Staphylococcus lugdunensis</td>
</tr>
<tr>
<td>Escherichia coli</td>
<td>Staphylococcus saprophyticus</td>
</tr>
<tr>
<td>Fusobacterium necrophorum</td>
<td>Streptococcus galloyticus</td>
</tr>
<tr>
<td>Haemophilus influenzae, not type b</td>
<td>Staphylococcus xylosus</td>
</tr>
<tr>
<td>Haemophilus parainfluenza</td>
<td>Stenotrophomonas maltophilia</td>
</tr>
<tr>
<td>Klebsiella aerogenes</td>
<td>Streptococcus agalactiae</td>
</tr>
<tr>
<td>Klebsiella pneumoniae</td>
<td>Streptococcus pneumoniae</td>
</tr>
<tr>
<td>Listeria monocytogenes</td>
<td>Streptococcus pyogenes</td>
</tr>
<tr>
<td>Methicillin-resistant Staphylococcus aureus (MRSA)</td>
<td>Vibrio parahaemolyticus</td>
</tr>
<tr>
<td>Micrococcus luteus</td>
<td>Viridans Streptococcus</td>
</tr>
<tr>
<td>Neisseria gonorrhoeae</td>
<td></td>
</tr>
<tr>
<td>Neisseria lactamica</td>
<td></td>
</tr>
</tbody>
</table>

**Fungi**

<table>
<thead>
<tr>
<th>fungus name</th>
<th>organism name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspergillus sp</td>
<td>Microsporum gypseum</td>
</tr>
<tr>
<td>Candida albicans</td>
<td>Penicillium sp.</td>
</tr>
<tr>
<td>Candida krusei</td>
<td>Rhizopus sp.</td>
</tr>
<tr>
<td>Curvularia sp.</td>
<td>Trichophyton rubrum</td>
</tr>
<tr>
<td>Fusarium sp.</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Students may also use blood and other body fluids from patients who have not been tested for hepatitis, HIV or other infectious disease agents. Students are required to practice universal precautions when handling all samples. Additionally, it is recommended that students are up-to-date on all vaccines, including the HBV and meningococcal, e.g. MenACWY and MenB.
I. Lockers and Lab Coat Hooks

Lockers for student use are provided in the VFS building and are located on the fourth floor. Coats, books, electronic devices and other items that you do not need for laboratory sessions should be kept in these lockers. There is no space for storage of these items in the laboratory!

Your laboratory coats must be stored separately from your possessions that leave the building. We designate specially marked hooks for lab coat storage. To obtain a lab coat hook & locker assignment, see the laboratory manager.

Small personal items, such as pens and markers used in the laboratory may be kept in laboratory coat pockets. It is recommended that pens and markers used in lab are kept separate from those not used in lab.

If you leave valuable items in these locations, we are not responsible if they are lost, damaged, or stolen.

J. Incidental Program Expenses

We try to keep your expenses as low as possible. As discussed above, you will need to purchase at least 2 pairs of plain black scrubs, at least one disposable lab coat per semester. Other materials that you will need include a lock for your assigned locker, an indelible BLACK marker (Sharpie is a good brand), a timer, and ANSI-approved safety glasses.

Each student will be required to purchase a subscription to LabCE for CLLS 256/456. And, prior to internship, each student will need to purchase a subscription to Trajecsys. More details about both of these expenses will be included at the beginning of each course.

Because most CLS courses require some form of calculation, you’ll also need a non-programmable calculator. Cell phones and other smart devices will not be allowed to use as a calculator during examinations.

One other expense that you may not have considered is a criminal background check. This will be required before you can be assigned to a clinical internship site. For most clinical sites, this will be performed at your own expense. In recent years, the cost has been about $35, but this may change.

Vaccinations or titers, drug screens, and TB skin tests may be required by individual clinical internship sites. For most clinical sites, this will be performed at your own expense.

Additional costs will be at the discretion of the instructor.

K. Name Badge
Each student is required to have a professional name badge. They are purchased for $2.50 in the Timme Center for Student services, M-F 8-5. No appointment is necessary. Indicate that you are in the Medical Laboratory Science or Medical Laboratory Technology Program.

Please have your name badge by the end of the first week of Summer semester.
Part III. Academic Policies

A. Core Curriculum

An important requirement to remember is that: YOU MUST EARN A C OR BETTER IN EACH COURSE IN THE CORE CURRICULUM. If you earn less than a C in any course in the core curriculum, you must repeat it before you can earn your certificate or degree. Failing to earn a C or better in the same COHP course after 2 attempts will result in a student being denied further in the MLS or MLT program. The only exception to this is ENGL 150, where you may progress with a grade of C-.

1. CHP Core Courses

The CHP requires that every student earning an associate or baccalaureate degree complete the CHP core curriculum in order to graduate. This core curriculum requires all students to complete three courses with a COHP prefix:

- COHP 100: Orientation to Medical Vocabulary (1 credit).
- COHP 101: The U.S. Health Care System (3 credits)
- COHP 102: Safety Issues in Health Care (1 credit)

Additionally, baccalaureate degree (MLS) students will also need to complete a statistics course (COHP 350) and research methods course (COHP 450). If you have taken another statistics course, it may be acceptable; consult your advisor to be sure.

2. Other Core Courses

Other requirements of the core curriculum include ENGL 150 and 250 for associate degree students; ENGL 311 for baccalaureate degree students (we require ENGL 311 Advanced Technical Writing), and COMM 105, 121, or 221, MATH through MATH 115 or 117 (we prefer MATH 117), and computer competency.

3. Computer Competency

According to the Computer Competency Listing, approved by the Core Curriculum Committee on April 29, 1999, you should be able to do:

Word processing/introductory desktop publishing, including:
- Enter and edit text
- Copy and move blocks of text
- Change text format and style, set margins, line spacing and tabs
- Check spelling, grammar, and word usage
- Create a header and footer
- Insert date, time, and page number
- Add columns and tables to a document
- Print a document
- Name, save, and retrieve a document
Spreadsheet/graphing

Enter data into an existing spreadsheet
Create a spreadsheet with rows, columns and headings
Create/copy formulas and functions to perform calculations
Create a graph or chart from spreadsheet data
Insert a spreadsheet into a word processing document
Print a document
Name, save, and retrieve a document

Database

Laboratory Information System
Access and print patient worklists and results
Enter and report patient results
Modify previously reported results
Reject tests that cannot be performed
Order tests

Networking

Connect/log on to a file server, retrieve a program or document, save a document to a specified location
Share files with others on a network
Use electronic mail (compose a message, send it, retrieve a message, read and respond to a message)
Assess and use resources on the Internet.

B. General Education Requirements for Graduation

Ferris State University requires certain courses in order to earn a degree. The requirements differ depending on the type of degree you intend to earn. Current information on general education requirements can be found in the university catalog, in each edition of the Schedule of Classes, and on the university's web page. Note that on the left of the page is a link called “Courses that meet requirements.”

Effective as of the fall of 2017, Ferris State University has implemented a revised General Education program. All students declaring an academic major in fall 2017 or later must fulfill the revised General Education requirements; students declaring a major prior to fall 2017 remain under the aegis of the old General Education requirements. The General Education program will be composed of eight demonstrable student competencies organized into three tiers. The foundation and distribution levels already exist at Ferris. The primary change effected is the combination of Global and Race, Ethnicity, and Gender under the common banner of Diversity. The two diversity courses will most likely also count for either Self and Society or Culture. Therefore, no net increase in student credit hours is required. The two new competencies are clustered in the application area. These courses are intended to be currently required upper-division (200- to
400-level) program courses. It is conceivable that two double-dipping courses
could satisfy these competencies completely. Only courses numbered 100 or
higher may fulfill the General Education requirements.

MLS (BS) Degree

Tier 1: Foundation Competencies

**Communication Competency**
To meet the Communication competency, the bachelor degree
student must prove proficiency through a 300-level Written
communication and 1 Oral communication course. A student must
meet all of the following:

- 3 courses, or the equivalent, with the Written
  communication attribute
- 1 of the 3 Written communication courses must be an
  upper division competency and can be met in one of the
  following ways:
  - 1 course at the 300-level or higher with the Written
    communication attribute
  - 2 courses with the Writing Intensive attribute and 1
    course with the Oral communication attribute
  - 3 courses with the Writing Intensive attribute
- 1 course with the Oral communication attribute

**Quantitative Literacy Competency**
To meet the Quantitative Literacy competency, a student must
meet one of the following:

- Complete or received credit for 1 course, MATH 114 or higher,
  with the Quantitative Literacy attribute
- Submission of an official Accuplacer score of 50 or higher in
  college level math
- Submission of an official SAT math score of 580 or higher
- Submission of an official ACT math subtest score of 24 or
  higher

Tier 2: Distribution Competencies

**Natural Sciences Competency**
To meet the Natural Sciences competency, a student must meet all of
the following:

- 2 courses, with a minimum of 6 credits, with the Natural
  Sciences attribute
- 1 of the 2 courses must have the Natural Sciences w/lab
  attribute
Culture Competency
To meet the Culture competency, a student must meet all of the following:
- 3 courses, with a minimum of 9 credits, with the Culture attribute
- The 3 courses must be from at least two different disciplines
- At least 1 of the 3 courses must be 200-level or higher
- A maximum of 5 of the 9 credits can have the Activities attribute

Self and Society Competency
To meet the Self and Society competency, a student must meet all of the following:
- 3 courses, with a minimum of 9 credits, with the Self and Society attribute
- The 3 courses must be from at least two different disciplines
- At least 1 of the 3 courses must be 200-level or higher
- At least 1 of the 3 courses must have the Self and Society Foundation attribute (the foundations course can be the 200+ level course)

Diversity Competency
If not met by courses taken for Culture, Self and Society, or MTA, a student must meet the following:
- 1 course with the Global Diversity attribute
- 1 course with the U.S. Diversity attribute
- Note: Some courses include both Global Diversity and U.S. Diversity attributes. Courses with both attributes satisfies the entire Diversity competency.

Tier 3: Application Competencies

Collaboration Competency
If not met by courses taken in the bachelor degree program a student must meet the following:
- 2 courses with the Collaboration attribute

Problem Solving Competency
If not met by courses taken in the bachelor degree program a student must meet the following:
- 2 courses with the Problem Solving attribute
Note: Some courses include both Collaboration and Problem Solving attributes

** Note: This competency may be partially met with Michigan Transfer Agreement (MTA). Check the MTA policy.

MLT (AAS) Degree

Tier 1: Foundation Competencies

** Communication Competency**
To meet the Communication competency, a student must meet all of the following:
• 2 courses with a minimum of 6 credits, with the Written communication attribute

** Quantitative Literacy Competency**
To meet the Quantitative Literacy competency, a student must meet one of the following:
• Complete or received credit for 1 course, MATH 109 or higher, with the Quantitative Literacy attribute
• Submission of an official Accuplacer score of 75 or higher in Elementary Algebra
• Submission of an official SAT math score of 500 or higher
• Submission of an official ACT math subtest score of 19 or higher

Tier 2: Distribution Competencies

** Natural Sciences Competency**
To meet the Natural Sciences competency, a student must meet all of the following:
• 1 course and a minimum of 3 credits, that has the Natural Sciences w/lab attribute

** Culture Competency**
To meet the Culture competency, a student must meet all of the following:
• 1 course and a minimum of 3 credits, that has the Culture attribute

** Self and Society Competency**
To meet the Self and Society competency, a student must meet all of the following:
• 1 course and a minimum of 3 credits, that has the Self and Society attribute

NOTE: All Bachelor Degrees at Ferris also require 1 course with the Global Diversity and 1 course with the U.S. Diversity attribute. For students wishing to continue to a Bachelor Degree, completion of these requirements within the Associate Degree is recommended. These requirements can be met without additional coursework because many Culture and Self and Society courses also meet the needed Diversity requirements.

Comparison of the old and new general education programs:

**COMPARISON OF THE OLD AND NEW GENERAL EDUCATION PROGRAMS**

To ensure a smooth transition to the new General Education program, existing General Education courses will be automatically certified and mapped according the the following mapping scheme:

<table>
<thead>
<tr>
<th>Current General Education Designation</th>
<th>New General Education Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication (oral)</td>
<td>Communication</td>
</tr>
<tr>
<td>Communication (written)</td>
<td>Communication</td>
</tr>
<tr>
<td>Cultural Enrichment</td>
<td>Culture</td>
</tr>
<tr>
<td>Global Consciousness</td>
<td>Diversity</td>
</tr>
<tr>
<td>Quantitative Skills</td>
<td>Quantitative Literacy</td>
</tr>
<tr>
<td>Race, Ethnicity, and Gender</td>
<td>Diversity</td>
</tr>
<tr>
<td>Scientific Understanding</td>
<td>Natural Sciences</td>
</tr>
<tr>
<td>Social Awareness</td>
<td>Self and Society</td>
</tr>
<tr>
<td>Writing Intensive Courses</td>
<td>Communication</td>
</tr>
<tr>
<td>---</td>
<td>Collaboration (new from programs)</td>
</tr>
<tr>
<td>---</td>
<td>Problem Solving (new from programs)</td>
</tr>
</tbody>
</table>

If you enrolled at Ferris prior to Fall 2017, you will remain under the old General Education requirements. See your advisor if you have questions.
C. Academic Advising

When you enter the professional phase of the CLS programs, you will be assigned an academic advisor from among the program faculty. Before that you will be assigned to the College Advisor. You MUST meet with your advisor at least once per semester, before you can register for the next semester. Bring any questions or concerns that you have when you meet with your advisor. If you can't meet with your advisor during his/her office hours, let him/her know, via voice mail or e-mail. We will do our best to schedule a time that meets your schedule.

When you meet, your advisor will review your progress toward graduation and help you choose a schedule that will meet your needs. However, it's your responsibility to be sure you have completed all the courses you need to get your degree.

The Ferris State University Registrar's Office, College of Health Professions, and CLS programs have the responsibility to maintain timely and precise records of the academic advancement and accomplishments of Ferris State University students, while maintaining the soundness, security, impartiality, and privacy of all academic records as delineated by the 1974 Family Educational Rights and Privacy Act.

At any time, if you need information or referral for assistance, your advisor can help. If we can't answer a question, we will help you find somebody who can.

If you need to make scheduling changes during a semester, please contact your advisor. Dropping a course can postpone your graduation and impact your financial aid award.
D. Progression in the CLS programs

1. CLS Grading Scale

All courses with the CLLS prefix use a standard grading scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>% score</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93+</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>90.00-92.99</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>87.00-89.99</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>83.00-86.99</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>80.00-82.99</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>77.00-79.99</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>73.00-76.99</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>70.00-72.99</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>67.00-69.99</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>63.00-66.99</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>60.00-62.99</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60.00</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Each course syllabus will include information about exactly HOW your grade for that course will be earned (what % comes from exams, what % from online assignments, etc.) If you have any questions, see your instructor.

2. Progression Policy

Clinical Laboratory Science Progression Policy

In recognition of the need to maintain acceptable standards for professional curriculum performance, as well as academic achievement, the following academic progression requirements shall apply to all students enrolled in the Medical Laboratory Technology and Medical Laboratory Science programs.

In order to progress in the program, a student shall maintain:

<table>
<thead>
<tr>
<th>Program</th>
<th>GPA</th>
<th>Courses with minimum C required</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Laboratory Science, MLS</td>
<td>2.50</td>
<td>BIOL 108 or 286, CHEM 114, CHEM 214, BIOL 205, COHP 100, COHP 101, COHP 102</td>
<td>Must complete professional phase within 5 years of beginning.</td>
</tr>
</tbody>
</table>
| Medical Laboratory Technology, MLT | 2.50 | BIOL 108 or 286  
|  |  | BIOL 205  
|  |  | CHEM 114  
|  |  | CHEM 214  
|  |  | COHP 100  
|  |  | COHP 101  
|  |  | COHP 102  
|  |  | All courses with CLLS prefix  
|  |  | Must complete professional phase within 3 years of beginning. |

If a student earns less than a C in any CLLS course, he/she will be required to repeat that course *when there is a seat available. A student in good academic standing has priority over a student who must repeat the course.*

A student may repeat a maximum of 3 credits of CLLS courses. Earning less than a C in courses totaling 4 or more credits will result in a student being denied from progressing further in the CLS program.

Failing to earn a C or better in the same course after two (2) attempts will result in a student being denied from progressing further in the CLS program. An attempt is defined as enrollment in the course for one week or longer.

Students must maintain a cumulative GPA of at least 2.50 for the duration of the program. If the cumulative GPA falls below 2.50 during the professional phase of the program, this will result in a student’s dismissal from the CLS program.

Students in the MLS program must complete the professional phase within 5 years of beginning. MLT students must complete the professional phase within 3 years. If a student cannot complete the program within the stipulated time, he/she will be required to reapply to the professional phase of the program.

No student will be allowed to enter the clinical experience or graduate from the program with less than a 2.50 cumulative grade point average, or with a grade of less than a C in any of the required professional courses.

You must meet with your academic advisor at least once per semester to discuss progress toward graduation.

### E. Graduation Audit

When you visit your advisor to discuss registration for your last semester on campus, you will need to ensure you have met all the requirements for graduation. This is easily done by using MyDegree to monitor your academic progress. You will also be required to complete an on-line application for graduation one semester before your expected graduation.
F. Attendance Policies

Each CLS instructor will include in the course syllabus information about his or her attendance policy. In summary, we expect you to attend as scheduled. Every class meeting is important. If you can’t attend, please call or e-mail in advance, if possible, to the instructor’s office and leave a message that you won’t be there.

**NOTE:** CLS faculty do not allow students to make up labs that they miss for any reason. You MUST come to lab, and you must be on time, and ready to go with the materials and supplies you need. You may NOT come to another section of lab if it happens to be more convenient for you. If you miss a lab, you may lose points and be on your own to learn the material.

The faculty for your non-CLS courses should include their attendance policies in their syllabi, too. If they don’t, it’s a good idea to ask. You may think that the instructor doesn’t care whether you attend class or not, and then find out that it’s an important part of your grade. It’s your responsibility to attend class!

The faculty of the College of Health Professions adopted the following attendance policy in October 2014:

In the College of Health Professions (CHP), attendance is valued as an example of professional conduct that is reflected in the various disciplines represented in the College. Consistent attendance is an expectation for all scheduled classroom, online, laboratory and clinical/internship learning experiences within the CHP program. Consistent attendance demonstrates the student’s commitment to learning as well as a sense of accountability to the professional program designed to provide them with the necessary knowledge and skills to prepare them as entry-level health care professionals. Based on this shared value among CHP faculty, each program has an explicit attendance policy to provide guidance for students as they progress through each individual professional program. CHP attendance policies and guidelines can be found in the student handbook for each CHP program.

G. Making up Missed Work

Each instructor will define his/her own policy for making up work that you miss if you are absent from class, or if you miss deadlines for electronic assignments. It’s a good idea to be sure you understand this policy for each class you take, too. We want you to succeed, and we’ll do our best to help you. See Section F above for information about missed laboratory sessions.

H. Cancellation of Classes

Generally, CLS classes don’t get cancelled. It’s best to plan on coming, if there’s a class scheduled. If we do have to cancel a class, we’ll let you know, probably via Blackboard or your Ferris email account.
Ferris State University seldom closes, no matter how bad the weather. If classes are cancelled, you will be informed on the Ferris web site, text message system, and via local media outlets.

I. Affective (Attitude) Objectives
In addition to knowledge and skills, your future employers will expect you to demonstrate a professional attitude in your work. So as part of your education on campus and in the clinical experience, you will be evaluated on your professional attitude. Here are the CLS program’s affective domain objectives:
<table>
<thead>
<tr>
<th>Percentage of affective score earned</th>
<th>Exceeds expectations (&gt;95%)</th>
<th>Meets expectations (85-95%)</th>
<th>Needs improvement (75-85%)</th>
<th>Does not meet expectations (&lt;75%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attends class as scheduled. If absent, documentation is provided in a timely manner</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alert &amp; attentive to work performed</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performs assigned tasks &amp; uses lab time wisely/efficiently</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follows safety training &amp; applies to work habits, including dress code and appropriate PPE</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintains a neat work area &amp; cleans up at end of lab</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shows preparedness, but asks relevant questions, as appropriate</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performs at an acceptable pace</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintains composure under stress</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintains academic honesty</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is sensitive to others, including cultural and gender sensitivity</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintains professional language in interactions with faculty &amp; peers</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Works well as a team member, when applicable</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifies any problems and works with faculty toward possible solutions</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates increasing decisiveness as experience is gained</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admits errors when they occur</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pays attention to detail</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follows lab policies &amp; procedures</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applies constructive criticism toward improving performance</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates appropriate professional behavior: including professional interactions with peers; vocalizes any complaints/criticism in a constructive manner</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handles/resolves conflicts tactfully</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
J. Discipline

1. Disruptive Behavior Policy

The College of Health Professions updated its Disruptive Student Behavior Policy in September 2014. Here is the updated policy:

CHP DISRUPTIVE BEHAVIOR POLICY Disruptive Behavior Policy Statement: The College of Health Professions strives to maintain a positive learning environment and educational opportunity for all students. Consequently, patterns of behavior which obstruct or disrupt the learning environment of the classroom or other educational facilities will be addressed.

1. The instructor is in charge of the course. This includes assignments, due dates, methods and standards or grading, and policies regarding attendance, tardiness, late assignments, outside conferences, etc.

2. The instructor is in charge of the classroom. This includes the times and extent to which they allow questions or discussion, the level of respect with which they and other students are to be treated, and the specific behaviors they will allow within their classes. Open discussion of an honest opinion about the subject of a course is encouraged, but the manner in which the class is conducted is a decision of the instructor.

3. An instructor is entitled to maintain order in his/her class and has an obligation to other students to do so. Toward that end, an instructor is authorized and expected to inform a student that his/her behavior is disrupting a class and to instruct the student to stop that behavior. If the student persists, the instructor is authorized to direct the student to leave the class. If the student fails to comply with a directive to leave the class, the instructor may call Public Safety to assist with the student’s removal.

4. If a student persists in a pattern or recurrent disruptive behavior, then the student may be subject to administrative action up to and including an involuntary withdrawal from the course, following administrative review by the Allied Health Sciences Dean’s Office and/or University disciplinary proceedings. (University disciplinary procedures are delineated in the “Code of Student Community Standards.” The code is available here.

5. Disruptive behavior cannot be sanctioned by a lowered course grade (e.g., from a B to a C) except insofar as quality of classroom participation has been incorporated into the instructor’s grading policy for all students. (Note: Academic misconduct, which is covered by other regulations, can be a legitimate basis for lowering a grade or failing the student.)
6. Students as well as employees are bound by the University’s policy against harassment, in any form. Harassment will not be tolerated. Refer to this statement.

7. The office of the student’s dean will be notified of any serious pattern or instance of disruptive behavior.

Guidelines for Instructors and other Personnel

1. Please review the University’s Code of Student Community Standards so that you are fully aware of both the student’s responsibility for appropriate conduct and the University’s disciplinary procedures pertaining thereto.

2. If you have specific behavioral expectations for your classes, you may find it helpful to include these in your syllabus and/or review them with all students at the beginning of the semester.

3. When disruptive behavior occurs in class or another education setting (e.g., computer lab, tutoring room), confront it directly and simply. Label the behavior as disruptive and tell the student to stop the behavior. Example: “Your throwing spit balls is disrupting the class. Please stop.” Or “Your talking is interfering with my ability to lecture and it is disrupting the class. Please stop or I will ask you to leave the room.” It is best to respond early, while you are most likely to be able to do so with little emotion.

4. If the student does not stop, do ask the student to leave the room. Make a note of that (e.g., on your grade book or office calendar). Do not tell the student he/she cannot return to the class at a later session, however, as this violates University policy. If the student refuses to leave, either dismiss the class or excuse yourself for a few minutes to call FSU Public Safety (extension #5000) to have the student removed.

5. If you experience a pattern of disruptive behavior and this student does not respond appropriately to clear, simple message, then inform your department head immediately. He/she will be kept informed about any changes in policy or procedures and can probably provide some good advice as well. Serious behavior problems, as well as any student who refuses to leave the room when instructed to do so, should also be reported to the Office of Student Conduct at 231.591.3619.

6. You may lower a student’s grade for being disruptive only to the extent that you have incorporated quality of class participation into your grading system for all students.
7. You may invoke the University’s disciplinary procedure against a disruptive student. In extreme cases, you may also ask the dean’s office to withdraw the student from your class, an action which may be taken following dean’s office review.

8. In cases of potential threat, dismiss the class and immediately call FSU Public Safety (x5000) from a nearby office or courtesy phone.

NOTE: When in doubt, don’t hesitate to talk with senior colleagues, your department head, or the dean’s office. Most problems can be resolved if addressed early and unambiguously. We are here to help you maintain a quality learning environment and the integrity of the classroom.

2. Academic Integrity and Professionalism

The University’s Academic Honesty Policy is included [here](#).

This policy states:

The University encourages a mature attitude toward learning and sound academic morale, and discourages illegitimate aids in examinations, laboratory work and homework assignments. Cheating, plagiarism and other forms of academic dishonesty including the acquisition, without permission, of tests and other academic material belonging to a member of the University community, and the sale and/or distribution of such material are in violation of University policy and subject to disciplinary action.

"Cheating" includes but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the University faculty or staff.

"Plagiarism" includes, but is not limited to, the use by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

A student who has been found to be in violation of academic misconduct may receive a failing grade in the course and any of the disciplinary sanctions outlined in the Board of Trustees policy of student responsibilities, including suspension or dismissal from the University.
In addition, the College of Health Professions states:

Cheating is defined as using or attempting to use, giving or attempting to give, obtaining or attempting to obtain products or prepared materials, information about a quiz or examination, or copies of work that a student is assigned to do alone and not in collaboration with others. Plagiarism (copying) of written work is also considered an infraction of this policy.

Students are required to present their own work except under circumstances where the instructor has requested or approved the joint efforts of a group of students.

The penalty for a first offense of willful cheating will be a grade of zero for the assignment. Cheating on a quiz or examination may mean failure of the course. The student may appeal any decision to the Program Director or Department Head.

3. Grade Change Appeal Procedure

The College of Health Professions Grade Change Appeal Policy can be found here.

Grade Change: The assignment of grades is a faculty responsibility. If a student disagrees with an assigned grade there is an appeal process. The student should first contact the instructor of the course. If there is still disagreement the student should contact the department head that offered the course. Final appeal rests with the dean’s office that offered the course.

4. Ferris State Policy on Student Complaints (Formerly Conflict Resolution)

When a student has an issue with a grade, internship or other student/faculty issue, it is the responsibility of the student to use a progressive procedure to resolve the issue. This policy provides a step-by-step means of resolving student/faculty issues. Individual programs may have other specific steps for resolving student/faculty issues. The policy for the College of Health Professions can be found here.

5. CHP Tobacco Use Policy

In response to student and faculty concerns, CHP updated the policy on tobacco use in September 2014. The policy states:

To promote the health and comfort of faculty, staff, students and visitors in the College of Health Professions the use of tobacco-related products is strictly prohibited. This policy pertains to the use of chewing tobacco, spitting containers, cigarettes, cigars, and all other tobacco or nontobacco smoking paraphernalia including non-tobacco cigarettes and other non-tobacco smoking inhalation
delivery systems. It is the responsibility of the CHP faculty, staff, students and visitors to adhere to this policy.

K. Excellence in Community Service

The College of Health Professions (CHP) aims to improve faculty-student engagement through shared participation in community service activities. To facilitate this engagement, CHP faculty and students will collaborate in the planning and implementation of two community service events each year, one in Fall semester and one in Spring semester. Students who 1) Participate in the two CHP community service events; 2) Complete at least 10 community service hours each semester (Fall and Spring) and 3) Provide evidence of meeting the first two criteria on the “CHP Community Service Log” form will earn an “Excellence in Community Service” certificate at the end of the academic year.

Part IV: Clinical Experience

A. Affiliates and Disclaimer

The CLS programs send students to a number of affiliated laboratories. Each laboratory offers a variety of laboratory testing and uses up to date instrumentation. Experienced laboratorians teach student interns how organize a workload, assess specimen quality, maintain and calibrate instruments, run procedures, validate test results, report results, and consult with physicians and nurses. Although no two sites are exactly alike, each provides a high-quality internship experience.

The affiliated sites available for internship placements may vary slightly from year to year, based on a variety of factors specific to that particular site. Students eligible for internship will be given a listing of sites at the beginning of the semester prior to their internship.

Disclaimer: While you may already have a “favorite” laboratory where you hope to be assigned for your clinical experience, please be aware that the CLS programs must have a current written affiliation agreement with the facility. The program cannot send a student to a facility with which it is not affiliated. The affiliated laboratories have the right to accept or reject any student. In addition, the ever-changing structure of health care organizations is beyond the control of the CLS programs. If laboratories merge, go out of business, have significant internal changes, or choose to remodel their facilities, they may not be able to accept students during a particular semester. Every effort will be made to place every eligible student in a clinical site when he/she is ready to go.
B. How to Be Assigned to Clinical Experience

1. Eligibility

To be eligible for clinical experience, you must first satisfactorily complete all prerequisites, including earning a C or better in all required courses. You must also have a 2.50 cumulative GPA. In addition, you must meet the non-academic requirements outlined below.

2. Criminal Background Check

Before each student can intern at an affiliated laboratory, a criminal background check is usually required, often at the student’s expense. This is an accreditation requirement for most clinical laboratories and is not optional. If there is something in your background that might make a clinical laboratory refuse to accept you for internship, you may want to talk with your academic advisor to look into your options.

Details concerning the process for undergoing a criminal background check may vary, both between years and between different facilities. If you have questions about this process, contact the Clinical Coordinator.

3. Interview and selection process for MLT and MLS Students

During the semester before you are assigned to a clinical site, you will be asked to interview at several internship sites. Most interviews will require you to travel to the clinical site. While you are there, you may be given a tour of the laboratory, and will meet with laboratory staff, which may include the clinical liaison (the primary contact for your clinical experience), assorted clinical instructors, and laboratory management. Some internship sites may have rotations split between different hospital campuses, and in this case, the sites may give you the opportunity to tour at the associated facilities.

If large numbers of applicants are interested in a specific site, the site may choose to screen resumes and then invite a smaller number of candidates to their laboratory for a face to face interview. Occasionally representatives from a lab may travel to Ferris State University to interview you on campus, and then schedule a laboratory visit at a later time.

Disclaimer: You are eligible for clinical placement when you are 1) enrolled in a CLS program; and 2) have taken the required courses and earned satisfactory grades required for progression in the program. When you have met those requirements, we will help you find a place. BE AWARE that your behavior and interviewing skills will also affect your clinical placement. If you don't meet the affiliated laboratory’s requirements (e.g. you fail to send or bring a resume, you dress for the interview unprofessionally, or you behave inappropriately), the affiliated laboratories can refuse to accept you as an intern. If that happens, the
CLS program has given you the opportunity to go to a clinical site and has fulfilled its obligation.

Some sites will request a resume and cover letter be sent to them prior to interviewing. Occasionally sites will request a copy of your unofficial transcript or ask you to complete some pre-interview questions. You should also have a copy of your resume available when you interview to leave it with the clinical liaison, if requested. If you are unsure how to assemble a resume and cover letter, take advantage of the Career Services Office. They can help you develop interviewing skills, too. For more information, click here.

After you have completed your interviews, the clinical affiliates will rank the students that they prefer to accept. The clinical site will make their choices based on your interview, your grades, and any other criteria that they choose. They relay their choices to the clinical coordinator who will then assign each student to a site based on each site’s preferences.

After you are assigned to a site, you will get information about the specific requirements for your internship experience, such as site requirements for immunizations and other on-boarding requirements, to potentially include hospital orientation, background checks, drug screening and any other needs specific to that site. The clinical liaison will contact you with information as to start dates and times, scheduled hours you are expected to be at the laboratory, where to park, the facility dress and appearance code, and any other pertinent details specific to the lab.

4. What if There Are More Students than Sites Available?

The programs have always had enough clinical sites for the number of students available. Our laboratory space on campus limits us to accepting a total of 28 (any combination of MLT and MLS) students each year. Our on-campus capacity usually prevents us from accepting more students than we can handle for internship placement.

However, if the enrollment exceeds the current number of internship places available, you will be ranked for assignment based on your current cumulative GPA and professional attitude. Consequently, it may be possible that you will be placed on a waiting list to be placed at the next available affiliate.

C. Clinical Experience Requirements

In addition to the Criminal Background Check requirement described above, the following requirements may also apply, depending on the individual internship site. All requirements must be met at the expense of the student:

1. TB test

The clinical affiliates may require documentation of a negative test for tuberculosis within the past calendar year. If you have received the BCG
vaccine, or if you have a positive screening test for TB, you may need to submit a report from a chest X-ray or other documentation that you do not have active tuberculosis. TB testing can be performed at the Birkham Health Center, at the Mecosta County Health Department, or at your physician’s office.

2. Hepatitis B vaccination or waiver

In order to participate in clinical experience, you may need to provide either proof of hepatitis vaccination or demonstrate a titer of anti-HBs. You may have gotten the vaccination as a child. If not, you can get the vaccine at the Birkham Health Center, the Health Department, or from your doctor’s office.

If you decline the vaccine, you may be required to sign a waiver acknowledging having been informed about the vaccine, the risks associated with NOT being vaccinated, and that you understand that you can change your decision at any time and be vaccinated. If you do not get the vaccine, we may require you to sign the waiver each year you are in the program.

Most of our affiliated clinical laboratories want you to be vaccinated against hepatitis B, or to show proof of antibody titer before you begin your clinical experience. **If you sign the waiver declining the vaccination, you may risk your eligibility for a specific site assignment, or to attend any site at all.**

3. Health insurance

You should provide your own health insurance during the clinical experience. If you are injured during your clinical experience, the site will provide emergency care if needed, at your expense. Ferris State University provides liability insurance for students during the clinical experience.

4. Other requirements

Some affiliates require proof of other immunity, such as to rubella, influenza, varicella, or others. The clinical coordinator will let you know when you are assigned to your site if there are any additional requirements that you need to meet. You may also be tested for the presence of nicotine. A positive test may prevent you from an internship placement. Other requirements may also be applicable, as per each individual site.

5. Trajecsys

A Trajecsys subscription will be required of all students during internship. This is a required course material that may be purchased through the book store or online.

Trajecsys will be used to disseminate internship materials, log your attendance, house your internship section evaluations, document your daily work, and provide additional means of communication with campus and your clinical site. At the end of your clinical internship, your records will be available for you to download as a way to provide documentation of your clinical experience.
D. Clinical Experience Policies

1. Attendance Policy

Your clinical experience will usually consist of an 8-hour day (40 hour week). Mostly this will be during the day shift. Exact times of starting and ending your shift will vary among the affiliates and may even vary between laboratory sections. You may be scheduled briefly on the evening shift, night shift, or on weekends as part of your clinical experience. You will always be working under the supervision of a qualified instructor. You are expected to arrive for your internship shift on time. If you will be late for any reason or will be absent, you must notify your clinical liaison and/or the teaching technologist you will be working with that day.

Attendance will be tracked using the Trajecsys system. Each day, you are required to log in and log out electronically within the system. Your attendance will be verified by a designated clinical instructor and is also reviewed by the clinical coordinator.

Every day at the clinical site is important. Certain activities are scheduled each day within each section of the lab. If you miss time, you are missing activities scheduled for that day. The teaching staff at each site are performing both patient testing and their regular job duties in addition to teaching you. If you are absent, this puts even more pressure on the teaching staff to schedule make up time for you.

We expect you to not miss any internship time, however, In some cases, you may have to be absent. If this is the case, you need a valid, documented excuse. For any absences, you MUST conform to the laboratory’s procedures for reporting your absence. Illness with a doctor’s note, a death in your family, or severe weather that closes roads are other valid reasons for absence. Again, you must follow the lab’s procedures for reporting your absence, and documentation of your absence must be provided to both your clinical liaison and to the clinical coordinator on campus.

You will not get time off for job interviews or for routine medical or dental appointments that are not true emergencies. You will also not get time off for vacation during your internship. Most hospitals have very strict attendance policies for their employees, and the same expectations are held for their interns. You may be absent with a documented excuse, however, you must work with your clinical liaison to make up the time you missed. Please note that you can only make up missed time under supervision, which may influence the timing and ability for make-up hours. Depending on the situation, you may be asked to make up time after your regularly scheduled internship hours, on a weekend, or by adding days on at the end of your internship. If time must be made up, it will be at the discretion of your clinical liaison, with approval from the clinical coordinator on campus. If additional days must be added to the regularly
scheduled internship, there may be a possibility that the make-up time will occur at an alternate site.

In addition to the make up time, for every 3 unexcused absences, your final grade for CLLS 491 will drop by one full letter grade.

2. Service Work Policy

During the clinical experience, you will not be substituted for regular laboratory staff. You may be scheduled to perform procedures, run instruments, or man a work station after you have successfully completed all the objectives for that area. However, you will still be working under the supervision of a clinical instructor.

During your clinical experience, you may work as an employee of the laboratory, if the laboratory permits this and if scheduled hours are available. If you are offered a position in your laboratory but are not progressing satisfactorily in your clinical experience, the site may discuss reducing your work schedule in order to help you be successful as an intern. You may not work for pay during your regularly scheduled internship hours. You may only work in an area of the laboratory where you have successfully completed the assigned objectives or have received hospital approved training.

Service work must be voluntary on both sides. You do not have to accept paid employment at the site if you are not interested. The laboratory does not have to offer paid employment to you.

If you are employed by the clinical site, you must be compensated for your work, and you must follow the normal employment policies of the institution. While you are working, you are NOT covered by Ferris State University liability insurance.

3. Outside Employment Policy

If you must work outside the laboratory during your clinical experience, please try to limit your hours. Your main job during your clinical experience is to practice the skills outlined by your objectives. You will still need to review theory and you may have formal homework assignments to complete. If outside employment is preventing you from completing your assigned work, we will recommend that you quit your outside job. If you continue to work and continue to perform below expectations, you may be removed from the clinical site.

4. Client Rights Policy

Your clinical experience may be the first time that you come into contact at a professional level with actual patients and clients of the laboratory. The population that you will be serving is likely to be more diverse than the students at Ferris State University or the population of your hometown.
We expect you to remember that each person with whom you interact as part of your responsibilities has inherent worth as a human being. You are expected to honor each person's dignity, and to respect their rights to privacy and their rights to their own religious and political beliefs. Each patient or client also has the right to be informed about what is being done to him or her, and the right to expect his or her laboratory test results will remain confidential.

Each laboratory will have a policy that covers client rights, and your responsibilities to protect those rights. We encourage you to become familiar with and to observe these policies.

E. How You Will Be Evaluated at the Clinical Site

1. Your skills and professional behaviors

During your internship, you will be registered for either CLLS 292 and CLLS 293 (MLT) or CLLS 491 (MLS). You will be evaluated by assigned instructors at the clinical site. Ferris State University provides specific objectives and check sheets for each laboratory area. These outline the specific tasks you should achieve, with estimated levels of competence for success. There are also objectives relating to your professional behaviors, as it is critical that you are able to conduct yourself during internship time as a medical professional. You'll be able to access a copy of these objectives and check sheets so you can track your progress, along with seeing your completed course evaluations in Trajecsys. Your course grades will be assigned based on these completed evaluations.

2. Your knowledge

During your internship, you will be registered for either CLLS 281 (MLT) or CLLS 480 (MLS). These are the courses that measure your knowledge of Clinical Laboratory Science. For each rotation, there will be an exam or quiz for you on Blackboard (Canvas) or LabCE Exams will be given for all major sections of the laboratory, as well as general laboratory operations. Each exam or quiz will cover laboratory theory, clinical correlation of results, and include some problem-solving questions.

Some affiliated labs may give you exams or quizzes. Their questions are likely to be directed toward THEIR instrumentation and THEIR procedures. It's a good idea to ask at the beginning of each clinical rotation whether the instructor will be giving you quizzes or exams beyond the ones from Ferris State University. If site specific exams are given, they will not count as part of your CLLS 281 or CLLS 480 course grade.

There are review materials available for most clinical rotations. These materials can be found in the Blackboard or Canvas materials for CLLS 281 or CLLS 480. The review material is optional and ungraded, but it's there for your use – you DO need to review.
Many labs also will assign "homework," or suggest you review certain concepts, which is to help you review your theoretical knowledge and prepare for the tasks you will be doing. Nobody remembers everything. If the clinical instructors want you to hand in or discuss this material, you will be expected to do so on time, just as you would on campus. You may or may not have time during your laboratory shift to work on these assignments.

This may seem like a lot of work to expect, in addition to the forty hours per week you're already spending in the lab, however, it is designed to help you prepare for the internship sections and also for the national certification exam.

**Policy Concerning National Certification Examinations**

When you complete your Ferris State University program in the Clinical Laboratory Sciences, you will become eligible for the national certification examination administered by the Board of Certification of the American Society for Clinical Pathology. Successfully completing this national certification examination will demonstrate to current and future employers that you have the knowledge required to function successfully as a medical laboratory technician or medical technologist/scientist.

You are NOT required to take a national certification examination as part of graduation requirements or as part of any course in the CLS programs. If you NEVER take the examination, that's your decision, however most employers do require proof of certification.

Information about this examination, including eligibility requirements and application procedures, is found at the [BOC Website](#).

The Clinical Coordinator of the CLS programs will discuss applying for the national certification examination with you as part of your preparation for clinical experience. It is your responsibility to acquire the most current application form and to complete it and schedule your examination. It is also your responsibility to pay to take the exam.

After you have submitted your application for examination, the certification agency will contact the program coordinator at Ferris about your eligibility. The program coordinator will approve your eligibility AS SOON AS YOU HAVE COMPLETED ALL REQUIREMENTS FOR GRADUATION. **He cannot say that you are eligible for certification until you have completed your program.**

If you get married or if your name changes for any other reason, PLEASE let the Program Coordinator know what your new name is. When he/she gets requests to approve applications from someone he/she doesn’t recognize, it is difficult to know how to respond.

The certification process requires that you submit an official transcript stating that you have completed your educational program. It is **your** responsibility to request an official transcript. You must send a transcript that indicates that you have completed all requirements for your degree. See [MyFSU](#) for procedures.
concerning applying for transcripts, as well as any fees. Your first official transcript is free!

Note that the Registrar’s Office will NOT send any transcripts until you have completed all your obligations to the university. This includes required exit interviews with the Financial Aid Office, unpaid parking tickets, and any other loose ends that you may need to deal with.

If the certification agency asks if you are willing to release your scores to the program, please say yes. Aggregate scores from each graduating class are used as part of program assessment. The program will NOT release your individual scores to anyone else.

If you are planning to take the certification examinations, we recommend that you take it as soon as possible after graduation. Your score is likely to be higher the sooner you take the exam.

You are responsible for completing and documenting the required continuing education credits to maintain your certification. Information on these requirements is also available at the Board of Certification web site.

F. Who Does What at the Clinical Site?

1. **Student Responsibilities at the Clinical Site**

   YOU have responsibilities at the clinical site, which boil down to doing your best to learn all you can while you're there. Here's a partial list of what you need to do to succeed:

   - Adhere to the attendance policy and properly notify your clinical liaison of any absences or late arrivals in a timely manner.
   - Adhere to the policies and regulations of the hospital and clinical laboratory.
   - Adhere to the dress code of the clinical affiliate.
   - Arrive prepared to begin your clinical responsibilities on or before the time required by the affiliate.
   - Acquaint yourself with where reference materials, reagents, and supplies are located in each area of the laboratory.
   - Review material from on-campus courses while in each corresponding clinical rotation.
   - Complete all assignments (including assigned homework) in time specified by the clinical instructors.
   - Read and follow all procedure manuals and policies of the organization.
   - Ask appropriate questions.
   - Conduct yourself in a professional manner.
   - Follow the appropriate organizational structure if a problem arises, as outlined in the CLS Student Handbook.
   - Read and take the responsibility for completing the objectives for each clinical course.
2. Clinical Instructors' Activities

Here’s what you may reasonably expect the clinical instructors to do while you’re on internship:

- Orient you to that laboratory section(s).
  - Explain policies.
  - Show where manuals, supplies, and reagents are kept.
  - Explain recording and reporting of test procedures.
  - Orient you to the laboratory information system.
- Develop a daily rotation schedule.
- Evaluate you in the cognitive, psychomotor, and affective domains.
- Answer appropriate questions. Direct you to possible sources of information if a question cannot be answered.
- Give you basic instructions until you can do the procedures on your own under supervision.
- Assist you in developing a professional attitude.
- Instruct you at the bench in regard to quality assurance, routine maintenance and troubleshooting, and correlation of laboratory data.
- Communicate any problems, no matter how minor they may be, to the appropriate individual.

3. Clinical Liaison Activities

One person at each site is designated as the Clinical Liaison. He or she will maintain records of your performance, resolve problems if and when they arise, and generally provide guidance while you’re at the clinical site. Here’s what you can reasonably expect that individual to do:

- Interview students.
- Submit rank order of preferred students to the on-campus Education Coordinator.
- Instruct the clinical adjunct instructors to distribute the internship materials.
- Schedule students in rotations, with instructor input.
- Schedule physicals, orientation, and/or other necessary arrangements for beginning clinical experience.
- Oversee clinical experience - meet with instructors and students regularly.
- Keep files of grades and all documentation as to how grades were derived.
- Submit the grades in a timely manner
- Contact appropriate on-campus Education Coordinator concerning all problems, no matter how minor.
- Establish policies for handling problems with students.
- Establish absentee policy with FSU approval.
- Attend CLS Advisory Committee meetings.
- Assure adherence to the service work policy.

G. Communication with Ferris State University
We don't forget you while you're on your clinical experience! You're paying tuition to Ferris State University, and you're getting academic credit for the work you do. For another thing, we're interested in how you're doing while you're out there!

Somebody from the CLS program faculty will call or send email about once a week, to see how you're doing. Canvas/Blackboard is also available for email and announcements. During any phone calls, we try to communicate with the Clinical Liaison, the instructor you're working with, and with you. This way, we get ideas of how you're doing from several perspectives. You are always welcome to call or email the Clinical Coordinator with any questions or concerns.

We also visit each student at least once during your clinical experience. While we're there, we like to see what's new at each site, talk to the Clinical Liaison, as many instructors as possible, and you! Usually these are enjoyable trips.

If you are having difficulty in meeting your assigned objectives, we will visit on an emergency basis if we need to. If we have to remove you from your clinical experience, we will need to meet with everyone involved, including you. Your rights will be protected. But bear in mind that your performance is likely to have caused any problems we're addressing.