Degree Type – Bachelor of Science (BS)
Degree Title – Clinical Laboratory Science

This degree will prepare students for certification and employment as Medical Laboratory Scientists. Graduates from this professional program are part of the health care team and play a vital role in the prevention, diagnosis, and treatment of disease through the performance of laboratory tests in hospital laboratories, physician office labs, and reference labs. It is also serves as an excellent undergraduate option for those students planning on applying to the graduate physician assistant program and medical and dental school. Students who plan to apply to the physician assistant program or medical or dental school should check for additional course requirements.

STUDENT LEARNING OUTCOMES:

1. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in hematology.
2. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in clinical chemistry.
3. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in immunohematology.
4. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in clinical microbiology.
5. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in urinalysis.
6. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in immunology.

A – GENERAL EDUCATION CORE – 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education core requirements.

Required

Life and Physical Sciences – 6 hours
CHEM 1311 General Chemistry I
CHEM 1312 General Chemistry II

Integrative and Experiential Learning – 3 hours
CHEM 1111 General Chemistry I Lab
CHEM 1112 General Chemistry II Lab
BIOL 1406 General Biology I (or BIOL 1487 Honors) one-hour lab

B – MAJOR REQUIREMENTS – 59 HOURS (59 advanced)

CLSC 3310 Hematology I
CLSC 3420 Clinical Chemistry I
CLSC 3513 Clinical Immunology and Immunohematology
CLSC 3630 Clinical Microbiology I
CLSC 4116 Advanced Immunology
CLSC 4122 Method Development and Research
CLSC 4144 Clinical Practicum V
CLSC 4200 Seminar
CLSC 4303 Medical Laboratory Leadership
CLSC 4314 Advanced Immunohematology
CLSC 4315 Molecular Genetics and Molecular Diagnostics
CLSC 4340 Clinical Practicum I
CLSC 4341 Clinical Practicum II
CLSC 4342 Clinical Practicum III
CLSC 4343 Clinical Practicum IV
CLSC 4411 Clinical Hematology II
CLSC 4521 Clinical Chemistry II
CLSC 4631 Clinical Microbiology II

C – SUPPORT COURSES – 22 HOURS
BIOL 1406 General Biology I (or BIOL 1487 Honors) three-hour lecture
BIOL 2401 Anatomy and Physiology I
BIOL 2402 Anatomy and Physiology II
CHEM 2323 Organic Chemistry I
CHEM 2123 Organic Chemistry I Lab
CLSC 2429 Clinical Microbiology in Health Care
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors or any other statistics course)

TOTAL CREDIT HOURS FOR GRADUATION – 123 HOURS

TOTAL ADVANCED HOURS – 59 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Admission requirements

Clinical Laboratory Science Program

The Clinical Laboratory Science Program begins in the fall semester. In order to be considered for admission, the student should submit an application by March 31. The admissions committee meets in April to consider all applications received by March 31. Applications received after March 31 are considered on a space-available basis. A completed application must include official transcripts and three letters of reference.

Successful completion of a criminal background check is also required for full admission into the Clinical Laboratory Science Program. Additional information may be found on the College of Health Affairs website. Students will be required to submit a physical examination form once they are admitted to the program. This must document that they have the required immunizations or proof of immunity including measles, mumps, tetanus/diphtheria, rubella, and the hepatitis B vaccine.

Students should complete all non-clinical laboratory science coursework prior to entering the professional phase of the program. Students who are lacking no more than two non-science prerequisite courses may be considered for admission if they have at least a minimum overall GPA of 3.0. Preference is given to students who have completed all prerequisite coursework. A minimum GPA of 2.0 and a minimum science GPA of 2.0 is required for admission to the program.

Applicants who plan to utilize coursework more than seven years old in the areas of general chemistry or the biological sciences will be required to demonstrate an up-to-date knowledge in these areas. This may be accomplished by either of the following:

1. Completion of at least one formal course in chemistry and one formal course in the biological sciences within the last five years with a grade of at least C.
2. One year of relevant experience in the field of clinical laboratory science within the last five years.

Non-degree Seeking Students

A student who does not wish to receive a degree from UT Rio Grande Valley, but who wishes to attend the professional portion of the curriculum for certification purposes must meet one of the following requirements:

1. Hold a baccalaureate degree from an accredited institution and have a minimum of 12 semester hours of chemistry including inorganic and organic or biochemistry and 16 semester hours of biology including microbiology and a college-level math course.

2. Hold a foreign baccalaureate degree from an international institution, meet all admission requirements of UT Rio Grande Valley and have his or her transcript evaluated by agencies acceptable to the National Certification Agencies. This evaluation must show that his or her degree is equivalent to a baccalaureate in the United States with appropriate coursework in biology, chemistry and mathematics.

Readmission

Students who are dropped from the program for academic reasons are not automatically readmitted. Students must make a formal written request for readmission. Readmission depends on space availability and the student’s previous performance in CLSC courses. Students will be notified of their readmission by August 1. The admission committee may require repetition of foundation clinical laboratory science courses or other remedial work in addition to the repetition of courses, which the student previously failed. Students who receive a grade of ‘D’ or lower in the same course twice or drop the same CLSC course twice to avoid a failing grade are ineligible for readmission into the CLSC Program.

Progression requirements

Students are required to maintain a grade of ‘C’ or better in all Clinical Laboratory Science courses. Courses with grades lower than ‘C’ must be retaken at the next regularly scheduled time that it is offered. Students who earn a grade less than a ‘C’ in any CLSC prerequisite course will not be allowed to take any advanced CLSC courses, which require that course as a prerequisite. All on-campus courses must be completed with a ‘C’ or better prior to beginning the clinical rotations. If a student fails to earn a ‘C’ or better in any two courses, or earns a grade lower than a ‘C’ in any required course two times, he/she will not be permitted to continue in the program.

Graduation requirements

Students must complete all professional courses with a grade of ‘C’ or better. Must complete all courses in the professional portion of the curriculum within a period of four consecutive years from the date of first enrollment in the program.