# CLINICAL LABORATORY SCIENCE (B.S.)

The Bachelor of Science (B.S.) in Clinical Laboratory Science (CLS) is designed for students who seek a degree, national certification, and Florida licensure as a clinical laboratory scientist. Your knowledge of the human body in health and disease is broadened in courses that include physiology, chemistry, human genetics, microbiology, transfusion medicine, immunology, hematology, and molecular diagnostics. Clinical experiences at community laboratories are integrated within the curriculum and enhance your growth as professionals. Graduates of this program have diverse skills for employment in a clinical or research setting. The CLS curriculum also serves as a solid preparation for medical, dental, veterinary, pharmacy, and graduate school.

### **Program Accreditation**

The CLS program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018, (773) 714-8880.

## **Program Admission Requirements**

The B.S. in CLS program at FGCU has been designated as specialized admissions. Consequently, the selection process is competitive and all qualified applicants may not be admitted to the program.

- Submit a FGCU Undergraduate Admission Application and satisfy all applicable university admission requirements.
- TOEFL or IELTS scores that meet minimum university admission requirements are required from applicants who have earned their bachelor's degree outside the United States in a country where English is not the official language. This requirement is not limited to international students.
- Submission of a completed CLS supplemental application after completion of common prerequisites.
- Earn a grade of C or better (a grade of C- or less is not acceptable) in each common prerequisite course.
- Earn a minimum combined GPA of 3.0 (on a 4.0 scale) for all common prerequisite courses.
- Applicants must be admitted to FGCU and supplemental application materials must be received prior to the established deadline.

## Program Progression and Additional Graduation Requirements

For timely degree completion, students must complete appropriate milestones. Failure to meet milestone requirements may result in required major reselection. Refer to the program website or CLS Student Guidebook for further information on milestones and progression standards.

In addition to the program requirements, students must:

- Earn a minimum of 120 credits with a cumulative grade point average of 2.0 on all course work attempted at FGCU.
- Earn, within the 120 total credits, a minimum of 48 credits at the upper division (3000-4999 level).

- Earn a grade of C or above in all courses identified in Sections 2, 3, 4, and 5 below. A grade of C- does not satisfy the requirement of a minimum grade of C.
- Satisfy the College-Level Skills and foreign language entrance requirements.
- · Satisfy the Service-Learning requirement.
- · Satisfy the Civic Literacy requirement.
- Satisfy the residency requirement: 30 of the last 60 credits must be completed at FGCU.
- · Complete the summer course enrollment requirement.
- Submit an Application for Graduation by the deadline listed in the FGCU Academic Calendar.

## **Program Requirements**

Code Title Credits

FGCU General Education Program (https://www.fgcu.edu/ academics/undergraduatestudies/generaleducation/)

To prevent or minimize excess hours, select general education courses that satisfy common prerequisite requirements for your intended major.

#### **Common Prerequisites**

For this major, common prerequisite courses with an asterisk (\*) require prior knowledge and skills demonstrated through degree acceleration programs (e.g., the College Board's Advanced Placement Program [AP], International Baccalaureate Program [IB], College-Level Examination Program [CLEP], Advanced International Certificate of Education Program [AICE]); dual enrollment; placement exam; or college coursework.

A minimum grade of C is required in each course

CHMX211L))

	A minimum grade	or C is required in each course	
	BSC 1010C	General Biology with Lab I (Acceptable Substitute: BSCX010C or (BSCX010 and BSCX010L) or BSCX011C or (BSCX011 and BSCX011L))	4
	BSC 1085C	Hum Anat & Physio w/Lab I (Acceptable Substitute: BSCX093C or (BSCX093 and BSCX093L) or BSCX085C or (BSCX085 and BSCX085L) or ZOOX733C or (ZOOX733 and ZOOX733L) or (ZOOX731 and ZOOX731L))	4
	BSC 1086C	Hum Anat & Physio w/Lab II (Acceptable Substitute: BSCX094C or (BSCX094 and BSCX094L) or BSCX086C or (BSCX086 and BSCX086L) or PCBX703C or (PCBX703 and PCBX703L) or (PCBX134 and PCBX134L))	4
	CHM 1045 & 1045L	General Chemistry I and General Chemistry I Laboratory (Acceptable Substitute: CHMX045C or (CHMX045 and CHMX045L)) *, 1	4
	CHM 1046 & 1046L	General Chemistry II and General Chemistry II Lab (Acceptable Substitute: CHMX046C or (CHMX046 and CHMX046L))	4
	CHM 2210 & 2210L	Organic Chemistry I and Organic Chemistry I Laboratory (Acceptable Substitute: CHMX210C or (CHMX210 and CHMX210L))	4
	CHM 2211 & 2211L	Organic Chemistry II and Organic Chemistry II Laborator (Acceptable Substitute: CHMX211C or (CHMX211 and	4

MCB 2010C	Microbiology with Lab (Acceptable Substitute: MCBX013C or MCBX020C or (MCBX020 and MCBX020L) or (MCBX023 and MCBX023L) or MCBX010C or (MCBX010 and MCBX010L))	4
or MCB 3020C	General Microbiology	
STA 2023	Statistical Methods (Acceptable Substitute: STAX014 or STAX023 or STAX024 or STAX321)	3 <sup>*, 2</sup>
Required Courses	in the Major	(57 credits)
Minimum grade o	f C (not C-) is required in each course	
BCH 3023C	Biochemistry	3
HSC 3161	Genetics for Health Sciences	3
IHS 3203	Mgmt. & Leadership in HIthcare	3
IHS 4504	Research Methods in HealthCare	3
IHS 4938	Senior Seminar	3
MLS 3038	Essentials of Clinical Lab Sci	3
MLS 3220	Biological Fluid Analysis	2
MLS 4191	Molecular Diagnostics	3
MLS 4308	Hematology/Hemostasis	3
MLS 4404	Diagnostic Microbiology	3
MLS 4462	Diagnostic VMP	3
MLS 4505	Clinical Immunology	2
MLS 4550	Immunohematology & Transfusion	3
MLS 4627	Clinical Biochemistry	3
MLS 4820C	Clinical Biochemistry Practicu	3
MLS 4821C	Clinical Microbiology Practicu	3
MLS 4822C	Clinical Hematology Practicum	3
MLS 4823C	Clinical Immunohematology Prac	3
MLS 4826C	Clinical Immunology Practicum	2
PCB 4233C	Immunology	3
Sustainability Cou	urse Graduation Requirement	(3 credits)
Coloot at loant 2 o	radite in austainability agureawark (SCGP Attrib	uto)

Select at least 3 credits in sustainability coursework (SCGR Attribute)

### **Additional Electives**

As needed to reach total credits required for the degree

**Total Credits Required: 120** 

Prerequisites of MAT 1033 minimum grade of C then MAC 1105 minimum grade of C; or relevant accelerated credit; or placement exam

Prerequisites of MAT 1033 Intermediate Algebra minimum grade of C; or relevant accelerated credit; or placement exam