

Bachelor of Science in Clinical Laboratory Sciences

The Clinical Laboratory Sciences program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS; 8410 West Bryn Maur Avenue, Suite 680, Chicago, IL 60631; (773) 714-8880).

Purpose

The purpose of the bachelor degree program in Clinical Laboratory Sciences (CLSS) is to provide cognizant and adept scientists capable of competing in the job market of the 21st century. The program will enhance basic skills in clinical laboratory science and, therefore, broaden career opportunities for the graduates. The graduates of this program are prepared to seek leadership positions, career enhancements, and/or pursue graduate studies.

Objectives

Following the successful completion of the program, the CLSS graduate is expected to:

1. Apply advanced knowledge and skills to the practice of clinical laboratory science;
2. Evaluate the results of laboratory analyses necessary for the diagnosis and management of human diseases;
3. Apply cognitive strategies and self-directed learning in the dynamic healthcare delivery system;
4. Exhibit the professional behaviors in the dynamic healthcare delivery system;
5. Exhibit an understanding of laboratory management issues such as human resources, finance, accreditation, quality assurance, and the professional, legal and ethical boundaries in meeting the healthcare needs of the clients;
6. Exhibit communication skills by presenting continuing education programs for laboratory personnel, client education programs, and participating on healthcare teams;
7. And seek national certification as a Clinical Laboratory Scientist, specialized certifications in CLS (i.e., cytogenetics, molecular biology, etc.), leadership positions, and/or advanced degrees.

Admission Requirements

The applicant must meet the following minimum requirements for admission to the CLS bachelor degree program:

1. Requirements for acceptance into the program are the same as for acceptance to OLOL College (See OLOLC Admissions);
2. And completion of the general education requirements with a grade of C or better (See Curriculum Plan).

Admission Process

Entrance into the CLSS program is competitive and based on the stated requirements. Priority is given to applicants who have successfully completed the CLST program, and who have provided evidence of understanding the demands of the profession. The CLST courses provide a foundation and indicate the applicant's potential for success in the CLSS program.

After acceptance, students must pass a criminal background check to meet clinical agency requirements, and final program acceptance may be contingent upon background check results. Information on the procedure for completing the criminal background check is in the student health packet distributed by the Office of Health and Campus Safety.

Clinical Laboratory Sciences – Bachelor's Degree Program Curriculum

Year 1 /Semester 1 (Fall)

Department	Course	Title	Credit Hours
ACSM	100	Academic Seminar	1
ENGL	101	English I	3
MATH	≥112	College Algebra or higher level mathematics	3
BIOL	111 or 210	General Biology I or Human Anatomy and Physiology I	3
CHEM	101	General Chemistry I	3
CHEM	103	General Chemistry Laboratory I	1
PSYC or SOCI	≥100	Introductory Psychology <i>or</i> Introductory Sociology	3
CLST	100	Introduction to Patient Care	1
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Year 1 /Semester 2 (Spring)

Department	Course	Title	Credit Hours
ENGL	102	English II	3
BIOL	112 or 211	General Biology II or Human Anatomy and Physiology II	3
BIOL	280	General Microbiology	3
BIOL	281	General Microbiology Laboratory	1
CHEM	102	General Chemistry II	3
CHEM	104	General Chemistry Laboratory II	1
CLST	101	Introduction to Laboratory Methods	3
			17

Year 2 /Semester 1 (Fall)

Department	Course	Title	Credit Hours
CSCI	100	Introduction to Computers	3
HUMN	Elective	Humanities Elective (religious studies, philosophy, etc.)	3
BIOL	≥ 300	Biology Elective	3
CHEM	201	<i>Organic Chemistry I</i>	3
CHEM	203	Organic Chemistry Laboratory I	1
			13

Year 2 /Semester 2 (Spring)

Department	Course	Title	Credit Hours
MATH	252	Statistics	3
HUMN	Elective	Humanities elective (religious studies, philosophy, etc.)	3
PSYC or SOCI	≥200	Psychology or sociology elective in sequence	3
BIOL	≥ 300	Biology Elective	3
CHEM	202	Organic Chemistry II	3
CHEM	204	Organic Chemistry Laboratory II	1
			16

Year 2 /Semester 3 (Summer)

Department	Course	Title	Credit Hours
HUMN	Elective	Humanities elective (religious studies, philosophy, etc.)	3
CLST	203	Urinalysis and Phlebotomy	2
CLST	205	Mycology and Parasitology	1
CLST	206	Clinical Immunology and Serology	1

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Year 3 /Semester 1 (Fall)

Department	Course	Title	Credit Hours
CLST	211	Clinical Chemistry	4
CLST	212	Hematology	4
CLST	213	Clinical Microbiology	4
CLST	214	Immunohematology	4
			16

Year 3 /Semester 2 (Spring)

Department	Course	Title	Credit Hours
CLSS	406	Laboratory Management	3
CLSS	409	Laboratory Education and Research	3
CLSS	416	Pathophysiology and Laboratory Diagnoses	8
			14

Year 3 /Semester 3 (Summer)

Department	Course	Title	Credit Hours
CLSS	420 (424)	Clinical Practicum V: Immunohematology and Genetics	3 (6)
			3 (6)

Year 4 /Semester 1 (Fall)

Department	Course	Title	Credit Hours
CLSS	421 (425)	Clinical Practicum VI: Advanced Chemistry	3 (6)
CLSS	422 (426)	Clinical Practicum VII: Advanced Hematology	3 (6)
CLSS	423 (427)	Clinical Practicum VIII: Molecular Microbiology	3 (6)
			9 (18)

Total credit hours for the degree 130

Transfer credit for art and science courses from other institutions, and credit-by-examination will be accepted according to OLOL College policy. CLSTs who have completed an associate degree CLST program at a regionally accredited institution will be given transfer credit for CLST 100 and 200 level courses.

Requirements for Graduation

The Bachelor of Science degree in CLS is conferred upon students when the following conditions are met, in addition to the general requirements for graduation:

1. Completion of one hundred twenty-six (126) semester credit hours in the required courses and successful completion of the professional courses.
2. A cumulative grade point average of 2.0 or higher on all college work with grades of C or better in all courses leading to the Bachelor of Science degree in CLS.

3. Fulfillment of the residency requirements of the College (36 credit hours).

Certification

Students completing the program are eligible to write for the certification examinations. Graduation from OLOL College and the CLSS program is not dependent upon taking or passing a certification examination.

Applications for the certification exams are available through the program director. It is the students' responsibility to complete and submit applications for the certification examinations by the designated deadline. The program director must sign the completed application.

Licensure

The graduates of the CLSS program will not be granted a permanent license to practice as a CLS-Generalist until he/she passes one of the national certification examinations.

Upon application for registration, certification and/or licensure, applicants will be required to declare whether or not they have ever been arrested or convicted of a felony, and will be subject to background searches which may disqualify them from acquiring the credential.