

Clinical Laboratory Science Degree (CLS) (*selective*)

Prepare to play a vital role in patient care by performing a wide range of clinical laboratory procedures used in the detection, diagnosis, and treatment of disease. The CLS curriculum provides general education courses and introductory CLS courses in the first year, then career-related courses and practical experience in the second year. The first year courses are open to students wishing to enter the CLS program. The second year CLS courses are restricted to those selected for the CLS program. Clinical laboratory technicians analyze specimens for bacteria, parasites, and other microorganisms; analyze the chemical content of body fluids; match blood for transfusions; and test for drug levels in the blood to show how a patient is responding to treatment. Clinical laboratory technicians also collect and prepare specimens for analysis. The important laboratory results generated by this testing are then analyzed and relayed to physicians. The modern clinical laboratory uses increasingly sophisticated instrumentation interfaced with computer technology. The CLS program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 North River Road, Suite 720, Rosemont, Illinois 60018, telephone 773-714-8880. Graduates of the CLS program will be eligible to take the national certification examination, such as that offered by the Board of Certification of the American Society for Clinical Pathology. The application deadline for the second year of the curriculum is April 1 (for clinical courses starting in the fall). This selective enrollment program requires additional application components. The selection process is competitive and space is limited (see page 13). For more information, call 978-630-9433.

Number	Suggested Course Order	Cr	Semester	Grade	Prerequisites/Notes
Semester I					
ENG101	English Composition I	3			ENG098, FYE101, RDG098, or placement
MAT126	Topics in Mathematics (<i>or higher</i>)	3			MAT096 or placement
BIO199	Anatomy and Physiology I	4			BIO099, ENG098, FYE101, MAT096, RDG098, or placement
CIS127	Computer Technologies	3			ENG098, FYE101, RDG098, or placement
CLS103	Introduction to Clinical Lab Science	3			Prerequisites: ENG098, FYE101, RDG098, or placement Note: Cycle 1
PLB102	Introduction to Phlebotomy for Pre-CLS	2			Prerequisites: ENG098, FYE101, RDG098, or placement Note: Cycle 2
Semester II					
ENG102	English Composition II	3			ENG101
BIO204	Anatomy and Physiology II	4			BIO199
CHE203	Introduction to Inorganic, Organic, and Biochemistry	4			ENG098, FYE101, MAT096, RDG098, or placement
BIO205	Microbiology	4			Prerequisites: ENG098, FYE101, MAT096, RDG098, or placement; BIO099 (or placement) BIO109, or BIO115, with C or better
CLS104	Introduction to Body Fluids	3			ENG098, FYE101, RDG098, or placement
	Social Science Elective	3			Electives: ANT, ECO, GEO, HIS, POL, PSY, SOC, SSC
January or May Intersession (two weeks)					
CLS102	Clinical Practicum in Phlebotomy and Urinalysis	2			CLS104, PLB102
Semester III					
CLS203	Clinical Hematology I	3			Restricted to students accepted to CLS Program
CLS205	Clinical Immunohematology I	3			Restricted to students accepted to CLS Program
CLS207	Clinical Microbiology I	3			Restricted to students accepted to CLS Program
CLS213	Clinical Chemistry I	3			Restricted to students accepted to CLS Program
	Humanities Elective	3			Electives: ART, ASL, ENG, FRE, HUM, MUS, PHL, SPA, THE Note: Can be taken any semester
Semester IV					
CLS204	Clinical Hematology II	3			CLS203; Restricted to students accepted to CLS Program
CLS206	Clinical Immunohematology II	3			CLS205; Restricted to students accepted to CLS Program
CLS208	Clinical Microbiology II	3			CLS207; Restricted to students accepted to CLS Program
CLS214	Clinical Chemistry II	3			CLS213; Restricted to students accepted to CLS Program
	Health Elective	2/3			Electives: BIO101, BIO103, BIO112, BIO230, CHC101, CHC102, CHC108, CHC220, EXS102, EXS201, PER126, PER127, PER130
Total: 70/71 credits					

See page 90 of the college catalog for program competencies and technical standards.

Campus/format: A majority of the pre-CLS courses (CLS102, CLS103, CLS104, and PLB102) are offered at the Gardner Campus. Clinical CLS course format consists of alternating weeks of lectures at the Gardner Campus and in-hospital internship. CLS is a day only, full-time, selective program.

Requirement for consideration: Applicants must meet certain academic standards. See page 13 of the college catalog for specific details or refer to the program application available on our website or through the admissions office.

Helpful hints: Success in this field requires attention to detail, flexibility to multitask and change tasks when interrupted, a strong concern for order, sound judgment and ability to conduct laboratory procedures accurately and when under pressure.

Transfer options: Consult the program director to discuss transfer and advanced career options.

3 Plus ONE eligible—go to: www.mwcc.edu/3PlusONE

Special requirements: Any student (after meeting with department chair) is eligible to enroll in courses in the first year of the curriculum. Only students accepted into the CLS program will enroll in CLS courses in the second year. CLS applicants must complete first year requirements before beginning the CLS program. Students enrolled in any CLS course have additional requirements. Applicants must meet all requirements for consideration before entering the program. Students must meet technical standards (see page 93) with or without accommodations and additional requirements including immunizations, physical examination, liability insurance, and a Criminal/Sexual Offender Records Information (CORI/SORI) check (see page 14). Students must maintain a C+ (77 percent) or better in all BIO, CHE, CLS, MAT, and PLB courses to maintain good standing. All students in selective majors must participate in the Massachusetts Community College Health Insurance Plan or provide accurate information regarding comparable coverage. Drug testing may be mandatory at some MWCC clinical instruction sites.

Career options: Clinical laboratory scientists may work in hospital laboratories; physicians' offices; private clinics; commercial and research laboratories; pharmaceutical, industrial and biotechnology firms; as well as government and public health facilities.

Earning potential: \$28,420 to \$44,310.