

## 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 automation 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.

Application deadline: The application deadline for the second year of the curriculum is May 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 15 of the college catalog).

For more information, call 978-630-9433.

Number	Suggested Course Order	Cr	Semester	Grade	Prerequisites/Notes
<b>Semester I</b>					
ENG101	English Composition I	3			ENG100, RDG100, FYE101, or placement
MAT126	Topics in Mathematics (or higher)	3			MAT096 or placement
BIO203	Anatomy and Physiology I	4			<b>Prerequisites:</b> ENG100, MAT096, RDG100, FYE101, or placement <b>Note:</b> BIO109 or BIO115 encouraged as prerequisite
CLS127	Computer Technologies	3			ENG100, RDG100, FYE101, or placement
PLB102	Introduction to Phlebotomy	3			ENG100, RDG100, FYE101, or placement <b>Note:</b> Cycle 1
CLS104	Introduction to Body Fluids	2			<b>Prerequisites:</b> ENG100, RDG100, FYE101, or placement; PLB102 <b>Note:</b> Cycle 2
<b>January or May Intersession (two weeks)</b>					
CLS102	Clinical Practicum in Phlebotomy and Urinalysis	2			CLS104, PLB102
<b>Semester II</b>					
ENG102	English Composition II	3			ENG101
BIO204	Anatomy and Physiology II	4			BIO203
CHE203	Introduction to Inorganic, Organic, and Biochemistry	4			ENG100, MAT096, RDG100, FYE101, or placement
CLS103	Introduction to Clinical Lab Science	3			CLS104, PLB102, BIO204 or co-requisite
BIO205	Microbiology	4			<b>Prerequisite:</b> ENG100, MAT092, RDG100, FYE101, or placement; <b>Note:</b> BIO109, BIO115 or BIO203 encouraged as prerequisite
	Social Science Elective	3			<b>Electives:</b> ANT, DSI, ECO, GEO, HIS, POL, PSY, SOC, SSC
<b>Semester III</b>					
CLS203	Clinical Hematology I	3			<b>Note:</b> Restricted to students accepted to CLS Program
CLS205	Clinical Immunohematology I	3			<b>Note:</b> Restricted to students accepted to CLS Program
CLS207	Clinical Microbiology I	3			<b>Note:</b> Restricted to students accepted to CLS Program
CLS213	Clinical Chemistry I	3			<b>Note:</b> Restricted to students accepted to CLS Program
	Humanities Elective	3			<b>Electives:</b> ART, ASL, ENG, FRE HUM, MUS, PHL, SPA, THE <b>Note:</b> Can be taken any semester
<b>Semester IV</b>					
CLS204	Clinical Hematology II	3			CLS203
CLS206	Clinical Immunohematology II	3			CLS205
CLS208	Clinical Microbiology II	3			CLS207
CLS214	Clinical Chemistry II	3			CLS213
	Health Elective	2/3			<b>Electives:</b> BIO101, BIO103, BIO112, BIO230, CHC101, CHC108, CHC220, EXS201, PER126, PER127, PER130
<b>Total: 70/71 credits</b>					

See page 91 of the college catalog for program competencies and technical standards.

**Campus/format:** A majority of the Pre-CLS courses (CLS102, CLS103, CLS104, and PLB101) are offered at the Gardner Campus usually at night. 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 15 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](http://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 applying for 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 91 of the college catalog) 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 16). Students must maintain a C+ (77 percent) or better in all CLS/BIO/CHE/MAT/PLB courses to maintain good standing. All students in selective majors must participate in the Massachusetts Community College Health Insurance 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:** \$26,430 to \$41,020.