

**Baccalaureate Degree Completion Guidelines for
Medical Laboratory Technicians/Clinical Laboratory Technicians**

**Department of Clinical Laboratory Sciences
MCV Campus of Virginia Commonwealth University**

Program Description

The Department of Clinical Laboratory Sciences at VCU Medical Center offers a course of study for certified MLTs/CLTs leading to the Bachelor of Science degree in Clinical Laboratory Sciences. MLTs/CLTs, who hold an associate degree in medical technology from an accredited community college and are certified as medical laboratory technicians, may be granted credit in the undergraduate Clinical Laboratory Sciences (CLS) program for upper-level course requirements through challenge examinations or exemptions based on documented competencies in required laboratory skills. In addition, students who meet the exemption eligibility requirements for the junior level laboratory portions of the curriculum may take the didactic courses online. Both full-time and part-time students are accepted into the program. The degree completion program including prerequisite courses requires a total of 125 semester credits, which are earned through course enrollment at VCU, transfer credit from other institutions of higher education, and credits based on documented competencies.

I. *Admission Requirements*

To be considered for admission to the degree completion program, applicants must submit a completed application package and:

1. Have an associate degree in medical laboratory technology from a NAACLS accredited MLT/CLT program.
2. Have a minimum cumulative G.P.A. of 2.0 on a 4.0 scale on all college/university courses completed prior to admission
3. Submit documentation of MLT/CLT national certification prior to enrollment in the undergraduate Clinical Laboratory Sciences program.
4. Receive satisfactory recommendation from MLT program director.
5. Be interviewed by CLS faculty as a component of the admission process.
6. Have satisfactorily completed a minimum of 44 non-MLT semester hours of transferable credit for admission as a full-time student, 38 non-MLT semester hours for admission as a part-time student. The following general education and science prerequisite courses must be completed prior to admission:

6 semester credits English composition

8 semester credits Biology (Survey courses do not qualify).

8 semester credits Chemistry (Survey courses do not qualify).
3 semester credits Mathematics (College Algebra or higher level)

II. Completion of Prerequisite Coursework

A total of 60 credits in prerequisite coursework must be completed for the B.S. degree. Once admitted into the baccalaureate program under special status, an MLT is required to complete the remainder of the prerequisite coursework, which may be transferred from another college or university during your studies at VCU prior to the final semester of the program. These requirements include:

an additional *4 semester credits of biology* (total of 12);

an additional *4 semester credits of chemistry* (total of 12);

3 semester credits of humanities (select from courses in history, philosophy, political science, religion, foreign languages, literature, or art history)/arts;

3 semester hours of social sciences (select from courses in anthropology, economics, geography, psychology, sociology or social sciences; may include selected courses in history and political science);

All students must complete psychomotor skills in *molecular diagnostic technology* either prior to entry to or during the CLS program. These skills may be obtained during completion of pre-requisite course work, through work experience, or by attending on-campus sessions in the Department of Clinical Laboratory Sciences. Examples of molecular diagnostic technology include: PCR and related technologies, Southern blot, microbiology molecular testing for infectious diseases.

These courses must be completed prior to the final semester of the program.

III. *Curriculum: Junior Year*

A. Exemptions: The student is eligible to receive up to 11.0 semester hours through exemptions based on training received in an accredited MLT/CLT program.

1. MLT (or eligible) students are exempt from the following course in the Clinical Laboratory Sciences curriculum:

CLLS 337 Clinical Education 1.0 credit hour

2. Exemptions from the laboratory portions of the CLLS 300 level courses are based on grades earned in the MLT/CLT program. A student who received a grade of C or above in each course related to a specific discipline in the MLT/CLT program will be exempt from the **laboratory portion of the corresponding CLLS course:**

<u>Course No.</u>	<u>Title</u>	<u>Lab Cr. Hrs.</u>
CLLS 301	Hematology	1.5
CLLS 304	Urine and Body Fluid Analysis	0.5
CLLS 306	Immunochemistry	2.0
CLLS 308	Path. Microbiology	2.0
CLLS 310	Clinical Immunology	1.0
CLLS 311/312	Clin. Chemistry and Instrumentation	3.0

3. Proficiency credit(s), but no grade, will be recorded on the student's transcript for the exempted course(s) at the completion of the semester in which the course is offered.
4. Exemptions apply only to courses taken within the last 5 years. Courses completed before that time will be evaluated, and the faculty member responsible for the course will have the option of requiring a proficiency test. For guidelines, see the following section on challenge examinations.

B. Challenge Examinations

1. Challenge examinations may be taken for the lecture and/or lab portions of all the junior level courses from which the student is not exempted.
2. Schedule: Challenge examinations are given 1 week prior to the beginning of the semester in which the course is offered.
3. Grading: A passing grade of 70% must be achieved to successfully complete a challenge examination.
4. Proficiency credit(s) but no grade will be recorded on the student's transcript for successfully challenged courses at the completion of the semester in which the course is offered.

IV. *Curriculum: Senior Year*

A. Senior Clinical Rotations

1. Certified MLTs who completed clinical training through an accredited MLT/CLT program within the last 5 years and/or the equivalent of at least 2 years of full-time work experience in a clinical laboratory as an MLT/CLT within the last 5 years would be permitted to obtain advanced standing (15 credits) for the following courses by passing the Clinical Qualifying Examination:

CLLS 483 Biochemistry Practicum (3 credits),
CLLS 485 Hematology Practicum (3 credits),
CLLS 493 Clinical Microbiology Practicum (3 credits),
CLLS 494 Miscellaneous Clinical Practicum (3 credits),
CLLS 496 Blood Bank Practicum (3 credits).

Pending the availability of space, students who have met the requirements in IIIA.1 may have the option of completing one or more rotations in lieu of the proficiency credits.

Cases in which students do not meet the requirements in IIIA.1 will be reviewed by the faculty on an individual basis to identify areas in which a clinical rotation must be completed.

2. Proficiency credit(s) for the practicum courses, but no grade, will be recorded on the student's transcript during the final semester of the program.

B. Senior Academic Classes

No senior academic courses may be challenged. Students will be allowed to take two senior courses prior to finishing the junior curriculum if they achieved a grade of B or higher in all courses relevant to the discipline.

C. Degree Requirements for All Undergraduate Students

In accordance with VCU's policy, degree candidates must complete at least 25 percent of the credit semester hours required for their bachelor's degree program at VCU, including at least 30 of the last 45 credits. For the CLS program, students must complete 31 credits of upper level coursework at VCU. Thus, students in the degree completion program may obtain a maximum of 34 proficiency credits obtained through exemption or challenge examinations.

V. *Online Curriculum*

MLTs/CLTs may complete all didactic coursework using distance-based learning technologies. The online courses eliminate the need for the students to relocate and allow them to continue to work as they complete the program. This option is restricted to MLTs/CLTs who are awarded proficiency credits for the laboratory sections of all the junior (300) level CLS courses through exemptions or challenge examinations. Students who choose this route must own a contemporary personal computer equipped with a cable or DSL modem.

VI. *Test-Examination Policy*

In addition to the policy stated in the Undergraduate Student Policies and Regulations manual, students will be expected to take all tests or complete assignments on the date specified in the course syllabus ± 1 day. For example, if a test is scheduled for a Wednesday, the student must complete the test between Tuesday and the close of the business day on Thursday. Student must inform the course instructor of the chosen test date and time. No extensions will be granted for any assignment/quiz/exam without acceptable documentation.

NOTE: The faculty reserves the right to add or delete policies as appropriate.

**DEPARTMENT OF CLINICAL LABORATORY SCIENCES
CURRICULUM FOR BS DEGREE COMPLETION PROGRAM**

***Junior Year
Fall Semester***

	COURSE NAME	LECTURE CREDIT HOURS	LAB CREDIT HOURS	TOTAL	APPROVED CREDIT
CLLS 301	Hematology	2.0	1.5*	3.5	2.0 – 3.5
CLLS 304	Urine and Body Fluid Analysis	1.5	0.5*	2.0	1.0 – 2.0
CLLS 307	Intro Path Micro	3.0		3.0	1.0 – 3.0
CLLS 310	Cl. Immunology	3.5	1.0*	4.5	3.5 – 4.5
CLLS 311	Clin Chemistry/ Instrumentation I	3.0	2.0*	5.0	3.0 – 5.0
		13.0		18.0	

Spring Semester

CLLS 302	Hematology	2.5	1.5	4.0	2.5 – 4.0
CLLS 306	Immunohematology	2.5	2.0*	4.5	2.5 – 4.5
CLLS 308	Path. Bacteriology	3.0	2.0*	5.0	3.0 – 5.0
CLLS 312	Clin. Chemistry & Instrumentation II	4.0	1.0*	5.0	4.0 – 5.0
		12.0		18.5	

Summer Semester

CLLS 337 Clinical Education 1.0 credit*

* The student is eligible to receive up to 11.0 semester hours through exemptions based on training received in an accredited MLT/CLT program. Exemptions from the laboratory portions of the CLLS 300 level courses are based on grades earned in the MLT/CLT program. A student who received a grade of B or above in each course related to a specific discipline in the MLT/CLT program will be exempt from the laboratory portion of the corresponding CLLS course. Challenge examinations may be taken for the lecture and/or lab portions of all the junior level courses from which the student is not exempted.

DEPARTMENT OF CLINICAL LABORATORY SCIENCES
CURRICULUM *cont.*

Senior Year

Fall Semester – Clinical Practicums

Certified MLTs who completed clinical training through an accredited MLT/CLT program within the last 5 years and/or the equivalent of at least 2 years of full-time work experience in a clinical laboratory as an MLT/CLT within the last 5 years would be **permitted to obtain advanced standing (15 credits)** for the following courses by passing the Clinical Qualifying Examination:

CLLS 483	Chemistry	3 credits
CLLS 485	Hematology	3 credits
CLLS 493	Microbiology	3 credits
CLLS 494	Miscellaneous	3 credits
CLLS 496	Blood Bank	3 credits
		15 credits

Spring Semester

	COURSE NAME	LECTURE CREDITS
CLLS 407	Inter. Immunochem.	2.5
CLLS 408	Adv. Microbiology	2.0
CLLS 409	Inter. Hematology	2.0
CLLS 410	Adv. Clin. Biochem/Inst.	2.0
CLLS 411	Ed./Management	3.0
CLLS 412	Senior Seminar	1.0
CLLS 438	Research Paper	1.0 (optional)
		12.5-13.5

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