# MASTER of SCIENCE (MS) in MEDICAL LABORATORY SCIENCE (MLS) CURRICULUM

MS in MLS students must complete a minimum of 33 credits of degree coursework as follows (instructors subject to change):

#### Foundations Courses = All Listed Courses Required (10 Credits)

Course #	Course Title	Credits	Instructor(s)
MLS 515	Capstone in Medical Laboratory Science*	2	Coleman
MLS 524	Current Trends and issues for the Laboratory Professional*	2	Solberg
MLS 525	Professional Communication in the Medical Laboratory**	3	Solberg, Triske, Waswick
MLS 590	Project Development***	1	Varied
MLS 997	Independent Study	2	Varied

<sup>\*</sup>Includes 1-4 synchronous online meeting dates; MLS 515-taken in last spring semester; MLS 524-taken in 1st or 2nd fall semester

### **Core Courses = 3 Courses Required (9 Credits)**

Course #	Course Title	Credits	Instructor(s)
MLS 502	Advanced Clinical Hematology: Erythrocytes	3	Peterson, S
MLS 503	Advanced Clinical Hematology: Leukocytes	3	Coleman
MLS 506	Advanced Clinical Chemistry	3	Ray
MLS 507	Advanced Clinical Immunohematology	3	Porter
MLS 513	Advanced Clinical Immunology	3	Gilbert
MLS 518	Advanced Molecular Diagnostics	3	Ray
MLS 522	Advanced Clinical Bacteriology	3	Triske
MLS 523	Advanced Non-Bacterial Microbiology	3	Peterson, K
MLS 526	Advanced Clinical Hemostasis	3	Solberg

## Leadership Courses = 1 Course Required (1 Credit)

Course #	Course Title	Credits	Instructor(s)
MLS 530	Medical Laboratory Leadership: Principles & Practice	1	Bakke
MLS 531	Medical Laboratory Leadership: Practical Applications	1	Bakke
MLS 532	Medical Laboratory Leadership: Conflict Resolution	1	Peterson, K

#### Elective Courses = Required to Reach Degree Total of 33 Credits

Note: Any Leadership or Core Course credits taken beyond the requirements will be counted as Elective Course credits

Course #	Course Title	Credits	Instructor(s)
MLS 501	Advanced Laboratory Practice: Technical Concepts	3	Jongeward
MLS 505	Advanced Laboratory Practice: Financial Management	3	Porter
MLS 509	Medical Laboratory Education: Teaching Principles	3	Solberg
MLS 517	Advanced Laboratory Practice: Administrative Concepts	3	Jongeward
MLS 527	Medical Laboratory Education: Assessment and Accreditation		Solberg
MLS 533	.S 533 Medical Laboratory Science and Public Health		Hove
MLS 589	Readings in Medical Laboratory Science	1	Peterson, S
MLS 591	Directed Studies in Laboratory Medicine (topic TBD)	1-4	Variable

## Comprehensive Exams = Both Exams Required

#	Title	Schedule	Facilitator
		(subject to change)	(subject to change)
1	Multidisciplinary Scientific Case Study	~1 year after starting program	Coleman
2	Professional Problem-Solving Case Study	~2 years after starting program	Jongeward

<sup>\*\*</sup>This course must be completed during your <u>first semester</u> of coursework

<sup>\*\*\*</sup>This course cannot be taken during your first semester, and must be completed prior to enrolling in MLS 997