

<b>SCSU BS Medical Laboratory Science (MLT to MLS/2+2) Program</b>		
<b>Department of Biological Sciences: Phone 320-308-2039 or Biology@stcloudstate.edu</b>		
<b>Medical Laboratory Science Major Advisor and Program Director Louise Millis 320-308-5438 Imillis@stcloudstate.edu</b>		
<b>First Semester</b>	<b>Second Semester</b>	
<b>BIOL 103</b> (3cr) Human Biology <b>CHEM 210</b> (4cr) General Chemistry I <b>MATH 112</b> (3cr) College Algebra <b>MLS 200</b> (2cr) Medical Lab Basics & Instrumentation <b><sup>1</sup>PHIL 194</b> (3 cr) Clinical Reasoning  <b>Total semester credits= 15</b>	<b>BIOL 151</b> (4cr) Cell Function and Inheritance <b>CHEM 211</b> (4cr) General Chemistry 2 <b>NHCC ENGL 1201</b> (4 cr) College Writing I <b>MLS 303</b> (2 cr) Medical Immunology <b>MLS 306</b> (2cr) Medical Microscopy & Urinalysis  <b>Total semester credits=16</b>	
<b>Third Semester</b>	<b>Fourth Semester - MLT-level clinical rotations</b>	
<b>MLS 301</b> (4 cr) Medical Hematology <b>MLS 302</b> (4 cr) Medical Chemistry <b>MLS 304</b> (4 cr) Medical Microbiology <b>MLS 305</b> (3 cr) Medical Immunohematology -  <b>Total semester credits=15</b>	<b>MLS 301</b> (3 cr) Applied Medical Hematology <b>MLS 302</b> (2 cr) Applied Medical Chemistry <b>MLS 304</b> (2 cr) Applied Medical Microbiology <b>MLS 305</b> (2 cr) Applied Medical Immunohematology <b>MLS 306</b> (2 cr) Applied Medical Phlebotomy & Urinalysis <b>CMST 192</b> (3 cr) Introduction to Communication Studies  <b>Total semester credits=14</b>	
<b>*Certified MLTs and MLT's employed as MLT's in a Clinic or Hospital may apply to SCSU for completion of the MLS program at this point</b> <b><sup>1</sup>Students must complete all 10 Goal areas of the Liberal Education Requirements</b>		
<b>Fifth Semester</b>	<b>Sixth Semester</b>	<b>Summer Session</b>
<sup>2</sup> <b>CHEM 240</b> (4cr) Basic Organic Chemistry <b>MLS 310</b> (2 cr) Anatomy & Physiology for MLS majors <b>MLS 407</b> (1 cr) Advanced Laboratory Management an Education  <b>Total semester credits=3-7</b>	<sup>2</sup> <b>CHEM 241</b> (4 cr) Basic Biochemistry <b>MLS 312</b> (3 cr) Molecular Pathology for MLS Majors <b>MLS 406</b> (1cr) Advanced Clinical Urinalysis and Body Fluids  <b>Total semester credits=4-8</b>	<sup>1</sup> <b>ENGL 191</b> (4cr) Introduction to Rhetorical & Analytical Writing – student may need ENGL 291 (2cr) Introduction to Analytical and Rhetorical Writing (for transfer students, to complete Engl requirement) <b>STAT 193</b> (3cr) Statistical Thinking or <b>STAT 239</b> (3cr) Statistical Methods I for Natural Sciences  <b>Total session credits=3-7</b>
<b>Seventh Semester</b>	<b>Eighth Semester</b>	<b>Summer/Fall/Beyond MLS-level clinical rotations</b>
<b>MLS 401</b> (2cr) Advanced Clinical Hematology <b>MLS 403</b> (1cr) Advanced Clinical Immunology and Molecular Genetics <b>MLS 404</b> (2cr) Advanced Clinical Microbiology  <b>Total semester credits=5</b>	<b>MLS 402</b> (2cr) Advanced Clinical Chemistry <b>MLS 405</b> (2cr) Advanced Clinical Immunohematology  <b>Total semester credits=4</b>	<b>MLS 401</b> (2cr) Advanced Applied Clinical Hematology <b>MLS 402</b> (2cr) Advanced Applied Clinical Chemistry <b>MLS 403</b> (1cr) Adv. Applied Clinical Immunology and Molecular Genetics <b>MLS 404</b> (2cr) Advanced Applied Clinical Microbiology <b>MLS 405</b> (2cr) Advanced Applied Clinical Immunohematology <b>MLS 406</b> (1cr) Advanced Applied Clinical Urinalysis and Body Fluids <b>MLS 407</b> (1cr) Adv. Applied Clinical Lab. Management and Education  <b>Total semester credits=11</b>

\*Students may apply for entrance into the MLS major after completion of Chem 210 and Math 112 with grades of 2.0 (C) or above. Students may not register for 300 MLS courses prior to acceptance into the major. Students may not register for 400-level MLS courses prior to acceptance into a clinical program.

<sup>1</sup>Refer to Goal Areas for requirements. Students need to complete all the Goal Areas (MN Transfer Curriculum) as part of this program, Students are advised to work on these courses during the summer.

<sup>2</sup>Chem 240 and Chem 241 can be taken before admitted to the program, note completion of these classes does not guarantee admittance. If admitted into program, Chem 241 must be completed or taken concurrently with MLS 402.

**Contact Information**

Program Director

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