## PROGRAMS

## MEDICAL LABORATORY TECHNOLOGY

## Contact(s): Dadrienne Johnson

The mission of Stanly Community College's Medical Laboratory Technology program is to train laboratory professionals who will make a positive impact in healthcare through leadership that will assure excellence in the practice of laboratory medicine.

The Medical Laboratory Technology curriculum prepares individuals to perform clinical laboratory procedures in chemistry, hematology, microbiology, and Immunohematology that may be used in the maintenance of health and diagnosis/treatment of disease. Course work emphasizes mathematical and scientific concepts related to specimen collection, laboratory testing and procedures, quality assurance and reporting/recording and interpreting findings involving tissues, blood, and body fluids.

Students who successfully complete the program are eligible to take the national certification examination administered by the Board of Registry of American Society for Clinical Pathology and become a certified Medical Laboratory Technician (MLT) (ASCP). With additional education and/or technical experience, graduates may also advance in the field to become a technologist, research specialist, manager, or educator. The Medical Laboratory/Clinical Laboratory Science field allows students to advance to a BS in Laboratory Science, a Master's degree in Molecular Diagnostics, and a doctorate degree as a DCLS (Doctorate in Clinical Laboratory Science).

Employment opportunities for graduates include laboratories in hospitals, medical offices, industry, and research facilities.

## Learning Outcomes

- Collect, prepare and evaluate biological specimens and other substances for analysis used in the diagnosis and treatment of patients.
- Discriminate and properly document the accuracy and validity of laboratory information.
- Appraise principles and practices of quality assessment.
- Interpret clinical signs, specimen types, and results of culture.
- Perform critical thinking, problem solving, and troubleshooting techniques.
- Demonstrate communication skills sufficient to serve the needs of the patient, the public, and members of the healthcare team and technical ability sufficient to train new employees.
- Recall and apply concepts and skills necessary to perform as a medical laboratory technician.


## MLT Program Outcomes

Graduation Rates, Certification Exam Pass Rates, and Job Placement Rates

## Accreditation

The SCC Medical Laboratory Technology Program is accredited by:
National Accrediting Agency for Clinical Laboratory Sciences
5600 N. River Rd. Suite 720
Rosemont, IL 60018-5119
(847) 939-3597
(773) 714-8880
(773) 714-8886 (FAX)
info@naacls.org
www.naacls.org
Medical Laboratory Technology Degree - A45420

| First Year |  |  |
| :---: | :---: | :---: |
| Fall |  | Credit Hours |
| ACA 111 | College Student Success | 1 |
| BIO 163 | Basic Anatomy \& Physiology | 5 |
| CHM 151 | General Chemistry I | 4 |
| MLT 110 | Introduction to Mlt | 3 |
| MLT 126 | Immunology and Serology | 2 |
| MLT 127 | Transfusion Medicine | 3 |
|  | Credit Hours | 18 |
| Spring |  | Credit Hours |
| CHM 152 | General Chemistry II | 4 |
| CIS 110 | Introduction to Computers | 3 |
| MED 120 | Survey of Medical Terminology | 2 |
| MLT 111 | Urinalysis \& Body Fluids | 2 |

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| MLT 120 | Hematology/Hemostasis I | 4 |
| :---: | :---: | :---: |
| MLT 140 | Introduction to Microbiology | 3 |
|  | Credit Hours | 18 |
| Summer |  | Credit Hours |
| ENG 111 | Writing and Inquiry | 3 |
| MLT 220 | Hematology/Hemostasis II | 3 |
| MLT 253 | MLT Practicum I | 3 |
|  | Credit Hours | 9 |
| Second Year |  |  |
| Fall |  | Credit Hours |
| ENG 112 <br> or ENG 114 | Writing and Research in the Disciplines Professional Research \& Reporting | 3 |
| MAT 143 or MAT 152 | Quantitative Literacy <br> Statistical Methods I | 3-4 |
| MLT 130 | Clinical Chemistry I | 4 |
| MLT 240 | Special Clinical Microbiology | 3 |
| MLT 265 | MLT Practicum II | 5 |
|  | Credit Hours | 18-19 |
| Spring |  | Credit Hours |
| MLT 217 | Professional Issues | 1 |
| MLT 275 | MLT Practicum III | 5 |
| Humanities elective* |  | 3 |
| Social Science elective* |  | 3 |
|  | Credit Hours | 12 |
|  | Total Credit Hours | 75-76 |

## AGE Pathway

| Courses |  | Credit Hours |
| :---: | :---: | :---: |
| ACA 111 | College Student Success | 1 |
| CIS 110 | Introduction to Computers | 3 |
| ENG 111 | Writing and Inquiry | 3 |
| ENG 112 <br> or ENG 114 | Writing and Research in the Disciplines Professional Research \& Reporting | 3 |
| MAT 152 | Statistical Methods I | 4 |
| BIO elective* |  | 5 |
| CHM elective* |  | 8 |
| Elective* |  | 31 |
| Humanities elective* |  | 3 |
| Social Behavioral Science elective* |  | 3 |
|  | Total Credit Hours | 64 |

## BIO elective

| Courses |  | Credit Hours |
| :--- | :--- | :--- | :--- |
| BIO 163 | Basic Anatomy \& Physiology | 5 |
| Courses |  | Credit Hours |
| BIO 165 | Anatomy and Physiology I | 4 |
| BIO 166 | Anatomy and Physiology II | 4 |
| Courses |  |  |
| BIO 168 | Anatomy and Physiology I | Credit Hours |
| BIO 169 | Anatomy and Physiology II | 4 |

## CHM elective

| Courses |  | Credit Hours |
| :--- | :--- | :--- |
| CHM 131 | Introduction to Chemistry | 3 |
| CHM 132 | Organic and Biochemistry | 4 |
| Courses |  | Credit Hours |
| CHM 151 | General Chemistry I | 4 |
| CHM 152 | General Chemistry II | 4 |

## Elective list

| Courses |  | Credit Hours$3$ |
| :---: | :---: | :---: |
| ART 111 | Art Appreciation |  |
| ART 114 | Art History Survey I | 3 |
| ART 115 | Art History Survey II | 3 |
| ART 116 | Survey of American Art | 3 |
| ART 117 | Non-Western Art History | 3 |
| BIO 110 | Principles of Biology | 4 |
| BIO 111 | General Biology I | 4 |
| BIO 112 | General Biology II | 4 |
| BIO 140 | Environmental Biology | 3 |
| BIO 163 | Basic Anatomy \& Physiology | 5 |
| BIO 165 | Anatomy and Physiology I | 4 |
| BIO 166 | Anatomy and Physiology II | 4 |
| BIO 275 | Microbiology | 4 |
| BUS 110 | Introduction to Business | 3 |
| BUS 115 | Business Law I | 3 |
| BUS 137 | Principles of Management | 3 |
| CHM 131 | Introduction to Chemistry | 3 |
| CHM 132 | Organic and Biochemistry | 4 |
| CHM 151 | General Chemistry I | 4 |
| CHM 152 | General Chemistry II | 4 |

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| CIS 110 | Introduction to Computers | 3 |
| :---: | :---: | :---: |
| CIS 115 | Introduction to Programming and Logic | 3 |
| CJC 111 | Introduction to Criminal Justice | 3 |
| CJC 121 | Law Enforcement Operations | 3 |
| CJC 141 | Corrections | 3 |
| COM 231 | Public Speaking | 3 |
| CSC 134 | C++ Programming | 3 |
| CSC 139 | Visual BASIC Programming | 3 |
| CSC 151 | JAVA Programming | 3 |
| CTS 115 | Information Systems Business Concepts | 3 |
| ECO 251 | Principles of Microeconomics | 3 |
| ECO 252 | Principles of Macroeconomics | 3 |
| EDU 216 | Foundations of Education | 3 |
| ENG 111 | Writing and Inquiry | 3 |
| ENG 112 | Writing and Research in the Disciplines | 3 |
| ENG 114 | Professional Research \& Reporting | 3 |
| ENG 125 | Creative Writing I | 3 |
| ENG 231 | American Literature I | 3 |
| ENG 232 | American Literature II | 3 |
| ENG 241 | British Literature I | 3 |
| ENG 242 | British Literature II | 3 |
| HEA 110 | Personal Health/Wellness | 3 |
| HIS 111 | World Civilizations I | 3 |
| HIS 112 | World Civilizations II | 3 |
| HIS 121 | Western Civilization I | 3 |
| HIS 122 | Western Civilization II | 3 |
| HIS 131 | American History I | 3 |
| HIS 132 | American History II | 3 |
| HIS 236 | North Carolina History | 3 |
| HUM 110 | Technology and Society | 3 |
| HUM 115 | Critical Thinking | 3 |
| HUM 120 | Cultural Studies | 3 |
| HUM 121 | The Nature of America | 3 |
| HUM 122 | Southern Culture | 3 |
| HUM 150 | American Women's Studies | 3 |
| HUM 160 | Introduction to Film | 3 |
| HUM 180 | International Cultural Exploration | 3 |
| MAT 143 | Quantitative Literacy | 3 |
| MAT 152 | Statistical Methods I | 4 |
| MAT 171 | Precalculus Algebra | 4 |


| MAT 172 | Precalculus Trigonometry | 4 |
| :---: | :---: | :---: |
| MAT 263 | Brief Calculus | 4 |
| MAT 271 | Calculus I | 4 |
| MAT 272 | Calculus II | 4 |
| MAT 273 | Calculus III | 4 |
| MUS 110 | Music Appreciation | 3 |
| MUS 112 | Introduction to Jazz | 3 |
| MUS 113 | American Music | 3 |
| MUS 210 | History of Rock Music | 3 |
| PED 111 | Physical Fitness I | 1 |
| PED 113 | Aerobics I | 1 |
| PED 120 | Walking for Fitness | 1 |
| PED 125 | Self-Defense: Beginning | 1 |
| PHI 215 | Philosophical Issues | 3 |
| PHI 240 | Introduction to Ethics | 3 |
| PHY 110 | Conceptual Physics | 3 |
| PHY 151 | College Physics I | 4 |
| PHY 152 | College Physics II | 4 |
| POL 120 | American Government | 3 |
| POL 210 | Comparative Government | 3 |
| PSY 150 | General Psychology | 3 |
| PSY 237 | Social Psychology | 3 |
| PSY 241 | Developmental Psychology | 3 |
| PSY 263 | Educational Psychology | 3 |
| PSY 281 | Abnormal Psychology | 3 |
| REL 110 | World Religions | 3 |
| REL 112 | Western Religions | 3 |
| REL 211 | Introduction to Old Testament | 3 |
| REL 212 | Introduction to New Testament | 3 |
| REL 221 | Religion in America | 3 |
| SOC 210 | Introduction to Sociology | 3 |
| SOC 213 | Sociology of the Family | 3 |
| SOC 232 | Social Context of Aging | 3 |
| SPA 111 | Elementary Spanish I | 3 |
| SPA 112 | Elementary Spanish II | 3 |
| SPA 141 | Culture and Civilization | 3 |
| SPA 161 | Cultural Immersion | 3 |
| SPA 181 | Spanish Lab 1 | 1 |
| SPA 182 | Spanish Lab 2 | 1 |

