



# Medical Laboratory Scientist Program

# Medical Laboratory Technician Program

Addendum to Student Policy Handbook for Health Sciences Programs

College of Southern Nevada

01/29/2019

## **College of Southern Nevada's Equal Employment Opportunity/ Affirmative Action Statement**

CSN is an Equal Employment Opportunity/Affirmative Action institution and does not discriminate on the basis of sex, age, race, color, religion, disability, national origin, veteran status, sexual orientation, genetic information, gender identity, or gender expression in the programs or activities which it operates. For more information, visit <http://www.csn.edu/nondiscrimination>

En Español:

CSN es una institución de igualdad y de oportunidades laborales/acción afirmativa y no discrimina a base del sexo, la edad, la raza, el color, la religión, la discapacidad, el origen nacional, el estatus de veterano, la orientación sexual, la información genética, la identidad de género, o la expresión de género en los programas o las actividades que opera. Para más información visite la página web <http://www.csn.edu/nondiscrimination>

## ***Academic Faculty***

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Program Director/Professor

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B.S., Far Eastern University

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Ph.D., Trinity College, Quezon

### **Michael Simpson**

Professor

Department: Dental Sciences, Diagnostic Evaluation and Rehabilitation Services

B.A., Adams State College

M.S., Northern Arizona University

## ***Medical Laboratory Scientist***

### ***Program Description***

The Medical Laboratory Scientist (MLS) is an important member of the health care team in hospitals, clinics, medical research and teaching centers, and is an indispensable participant with physicians in providing critical diagnostic information. The MLS functions as a dependable, ambitious and highly motivated professional capable of handling high stress situations with ease and confidence.

The Medical Laboratory Scientist performs and interprets diagnostic laboratory procedures using state-of-the-art instrumentation to aid in the detection, diagnosis and treatment of disease; monitors the standards of accuracy and precision in the performance of tests; performs routine maintenance; analyzes and corrects instrument problems; researches, evaluates and implements new procedures; and may be responsible for fiscal/personnel management of laboratory.

The Bachelor of Applied Science degree in Medical Laboratory Scientist combines academic and laboratory courses on campus with practical experience at clinical affiliate sites.

Upon successful completion of the program, students will be awarded a Bachelor of Applied Science degree and become eligible to challenge a national certification examination. Issuing of the degree is not contingent upon passing any type of certification examination. Students who pass a qualifying certification examination are eligible for Nevada state licensure as a Medical Laboratory Scientist.

### **Accreditation**

The MLS program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). NAACLS accredits a variety of programs in health-related fields and is recognized by the Council for Higher Education Accreditation (CAHEA). Recognition by CAHEA affirms that standards and processes of accrediting organizations are consistent with quality improvement, and accountability expectations that CAHEA has established. NAACLS also confirms the Code of Good Practice of the Association of Specialized and Professional Accreditation. NAACLS contact information is provided below:

National Accrediting Agency for Clinical Laboratory Sciences

5600 N. River Road, Suite 720

Rosemont, IL, 60018-5119

Ph. 773-714-8880

Fax: 773-714-8886

E-mail: [info@naaccls.org](mailto:info@naaccls.org)

[www.naaccls.org](http://www.naaccls.org)

The College of Southern Nevada is formally recognized by the American Medical Technologists (AMT), a national certification agency for allied health professionals. Students completing the Medical Laboratory Scientist (Medical Technologist) program are eligible to challenge the appropriate AMT examination.

American Medical Technologists  
10700 West Higgins, Suite 150  
Rosemont, IL, 60018  
Ph. 847-823-5169  
<http://www.amt1.com/>

### ***Medical Laboratory Technician Program Description***

The MLT Program will prepare you to work in all areas of the clinical laboratory (i.e., hematology, chemistry, blood bank, immunology, microbiology and urinalysis). Courses in each of the disciplines mentioned above are presented in both lecture and laboratory format. Additionally, students will be assigned to several local laboratories to obtain clinical experience at scheduled times during the program. The general education requirements for the AAS degree in Medical Laboratory Technology include coursework designed to help develop the basic and critical thinking skills necessary for effective communication and problem solving. Math and science courses will provide the necessary foundation for understanding concepts covered in professional courses.

Upon successful completion of the program, students will be awarded an Associate of Applied Science degree and become eligible to take a national certification examination. Issuing of the degree is not contingent upon passing any type of certification examination. Students who pass a qualifying certification examination are eligible for Nevada state licensure as a Medical Laboratory Technician.

Examples of agencies that administer certification examinations in several Clinical Laboratory Sciences disciplines include:

American Society of Clinical Pathology  
33 West Monroe Street, Suite 1600  
Chicago, IL 60603  
Ph. 800-267-2727  
[www.ascp.org/bor](http://www.ascp.org/bor)

American Medical Technologists  
10700 West Higgins, Suite 150  
Rosemont, IL, 60018  
Ph. 847-823-5169  
<http://www.amt1.com/>

## **Accreditation**

The MLT program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). NAACLS accredits a variety of programs in health-related fields and is recognized by the Council for Higher Education Accreditation (CAHEA). Recognition by CAHEA affirms that standards and processes of accrediting organizations are consistent with quality improvement, and accountability expectations that CAHEA has established. NAACLS also confirms the Code of Good Practice of the Association of Specialized and Professional Accreditation. NAACLS contact information is provided below:

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The College of Southern Nevada is formally recognized by the American Medical Technologists (AMT), a national certification agency for allied health professionals. Students completing the Medical Laboratory Technician program are eligible to challenge the appropriate AMT examination.

American Medical Technologists  
10700 West Higgins, Suite 150  
Rosemont, IL, 60018  
Ph. 847-823-5169

## ***Mission Statement***

### ***Medical Laboratory Scientist Program***

The mission of the Medical Laboratory Scientist Program is to provide learning experiences that allow students to acquire theory and skills necessary to perform and interpret complex medical laboratory procedures, and to operate successfully as a laboratory professional.

### ***Medical Laboratory Technician Program***

The mission of the Medical Laboratory Technician Program is to provide learning experiences that allow students to acquire theory, and develop laboratory techniques and critical thinking skills necessary to operate successfully in a clinical laboratory setting.

## ***Student Learning Outcomes***

### ***Medical Laboratory Scientist Program***

The student learning outcomes of the College of Southern Nevada Medical Laboratory Scientist program are to ensure that graduates are competent in the areas of professional practice listed below:

1. Select appropriate courses of action in accordance with established laboratory procedures.
2. Assess and correlate clinical and/or laboratory data through the application of theory and principles.
3. Evaluate and perform full range of clinical laboratory procedures, including quality assurance and quality control procedures.
4. Differentiate and resolve technical, instrument, and/or physiologic causes of unexpected or abnormal data.

### ***Medical Laboratory Technician Program***

The student learning outcomes of the College of Southern Nevada Medical Laboratory Technician program are to ensure that graduates are competent in the areas of professional practice listed below:

1. Assess and correlate clinical and/or laboratory data through application of theory and principles.
2. Perform and/or interpret laboratory calculations.
3. Select appropriate courses of action in accordance with established laboratory procedures.
4. Evaluate laboratory data to recognize and report clinically relevant results according to established procedures.

## **GOALS & COMPETENCIES**

### ***Medical Laboratory Scientist Program***

The goals of the College of Southern Nevada Medical Laboratory Scientist Program are:

1. To ensure that graduates are competent in the areas of professional practice as listed in numbers 1 – 11 under the Medical Laboratory Technician Program Goals (please see below).
2. To provide laboratory-oriented educational opportunities with theoretical knowledge and clinical experience in clinical chemistry, hematology/hemostasis, immunology, immunohematology, and microbiology (including molecular diagnostics) and their medical and/or clinical applications.
3. To prepare graduates to have a reasonable expectation of passing a national qualifying examination for the medical laboratory profession.
4. To provide graduates with the entry level competencies needed to work as a Bachelor of Applied Science degreed medical laboratory scientist.

### ***Medical Laboratory Technician Program***

The goals of the College of Southern Nevada Medical Laboratory Technician program are to ensure that graduates are competent in the areas of professional practice listed below:

1. Collecting, processing, and analyzing biological specimens and other substances.
2. Performing analytical tests of body fluids, cells, and other substances.
3. Recognizing factors that affect procedures and results and taking appropriate actions within predetermined limits when corrections are indicated.
4. Performing and monitoring quality control with predetermined limits.
5. Performing preventative and corrective maintenance of equipment and instruments or referring to appropriate sources for repairs.
6. Applying principles of safety.
7. Demonstrating professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and the public.
8. Recognizing the responsibilities of other laboratory and health care personnel and interacting with them with respect for their jobs and patient care.
9. Applying basic scientific principles in learning new techniques and procedures.
10. Relating laboratory findings to common disease processes.
11. Establishing and maintaining continuing education as a function of growth and maintenance of professional competence.



## ***Academic Advising***

Academic advising can make the difference between success and failure in college. Health Program Advisors are available to meet with you to begin your academic journey at CSN.

To get you started, a Health Program Advisor will:

- Interpret your placement scores, CSN course history, and transfer credits so you know your sequence of required prerequisite and general education courses.
- Discuss prerequisites.
- Explain CSN health programs options as well as potential career or Associate of General Studies (AGS) degree completion.
- Inform you on important CSN resources available to you.

Upon admission, each student is assigned a faculty advisor, who meets with the student periodically to ensure compliance with academic requirements, graduation and national certification deadlines, and other issues as necessary. The advisor also addresses any student concerns regarding academic or career expectations, and serves as a facilitator for students who may need additional accommodations. All student-faculty interaction is documented on a standardized advisement sheet and/or in the advising notes in MyCSN. Advisement sheets are maintained in the student files.

## ***Clinical Rotations***

You will be assigned to one or more clinical facilities, subsequent to the successful completion of each professional course, to practice your technical skills during a supervised clinical practical rotation.

### **Service Work**

The clinical practical rotation is taken for credit and you will not be compensated for your work during this time. It is permissible for you to perform service work at a clinical facility for pay outside of your regular rotation assignment hours. This would be arranged between yourself and the clinical facility. Service work is non-compulsory, is not a part of the clinical rotation; and students are not a replacement for qualified staff.

### **Performance of Laboratory Testing**

Students will not perform laboratory procedures unsupervised. However, students may, where allowable, perform procedures under qualified supervision at the discretion of the clinical site.

## **Clinical Site Assignments**

Clinical sites determine the number of students accepted during any rotation cycle. If the number of rotations is less than the number of students in the program, rotations will be assigned as follows:

- Students who have completed all degree requirements except for clinical rotations.
  - Students will be ranked using the overall GPA as recorded on the student's unofficial transcript
- Students who have not completed all degree requirements except for clinical rotations
  - Students will be ranked using the overall GPA as recorded on the student's unofficial transcript.
    - If there is no GPA on the student's unofficial transcript, the GPA used for program admission will be used.
  - If GPA is equal among students, students will be ranked based on the date of the completion of required documents.
- Subsequent rotation dates will be sought for students not placed during a rotation cycle, and placements will be made as positions become available. Placements should be made within one year of the original rotation cycle.
- If a clinical site cancels a scheduled rotation prior to the scheduled start date, and the student is not the cause of the cancellation, subsequent rotation dates will be sought and placement will be made as positions become available.
- If a student is placed at a military facility, and there is an immediate cease of the contract due to the military mission, students will have an alternate placement as soon as a position becomes available.
- If a student has not been assigned to a site for a full rotation, alternative activities will be provided using the student laboratory facilities.

## ***Clinical Affiliate Facilities***

Please contact the Program Director for a current list of clinical affiliates.

*CLS*  
*Signature*  
*Forms*

## ***Essential Requirements for Clinical Laboratory Science***

The Americans with Disabilities Act (ADA) prohibits discrimination against academically qualified program applicants with disabilities, and requires a list of essential requirements, distinct from academic requirements and distinct from essential functions of jobs, for each academic program. Essential requirements are task and attribute-based criteria that define an educational program. The essential requirements provide a basis for student admissions and academic progress measurement. Students must possess or be able to achieve the essential requirements directly or through reasonable accommodations.

Please read the following observational, movement, communication, and behavioral essential requirements identified for the MLS and MLT programs. ***Your initial indicates*** that you have had the opportunity to request clarification when necessary and possess the essential requirements necessary for a student in the Medical Laboratory Scientist/Medical Laboratory Technician Program.

1. \_\_\_\_\_ Observe laboratory demonstrations in which biological materials are tested for their biochemical, hematological, immunological, microbiological, and histochemical components.
2. \_\_\_\_\_ Characterize the color, odor, clarity, and viscosity of biologicals, reagents, or chemical reaction products.
3. \_\_\_\_\_ Employ a clinical grade binocular microscope to discriminate among fine structural and color differences of microscopic specimens.
4. \_\_\_\_\_ Read and comprehend text, numbers, and graphs displayed in print and on a video monitor.
5. \_\_\_\_\_ Move freely and safely about a laboratory.
6. \_\_\_\_\_ Reach laboratory bench tops and shelves, patients lying in hospital beds or patients seated in specimen collection furniture.
7. \_\_\_\_\_ Travel to numerous clinical laboratory sites for practical experience.
8. \_\_\_\_\_ Perform moderately taxing continuous physical work, often requiring prolonged sitting or standing, over several hours.
9. \_\_\_\_\_ Maneuver phlebotomy and culture acquisition equipment safely to collect valid laboratory specimens from patients.
10. \_\_\_\_\_ Control laboratory equipment, such as pipettes, inoculating loops, and test tubes.

11. \_\_\_\_\_ Use an electronic keyboard to operate laboratory instruments and to calculate, record, evaluate, and transmit laboratory information.
12. \_\_\_\_\_ Read and comprehend technical and professional materials.
13. \_\_\_\_\_ Follow verbal and written instructions in order to correctly and independently perform laboratory test procedures.
14. \_\_\_\_\_ Effectively, confidentially, and sensitively converse with patients regarding laboratory tests.
15. \_\_\_\_\_ Communicate with faculty members, fellow students, staff, and other health care professionals verbally and in a recorded format, such as writing, typing, graphics, or telecommunication.
16. \_\_\_\_\_ Independently prepare papers and laboratory reports, and take paper, computer, and laboratory practical examinations.
17. \_\_\_\_\_ Manage the use of time and systemize actions in order to complete professional and technical tasks within realistic constraints.
18. \_\_\_\_\_ Possess the emotional health necessary to effectively employ intellect and exercise appropriate judgments.
19. \_\_\_\_\_ Provide professional and technical services while experiencing the stresses of task-related uncertainty.
20. \_\_\_\_\_ Be flexible and creative and adapt to professional and technical change.
21. \_\_\_\_\_ Recognize potentially hazardous materials, equipment, and situations and proceed safely in order to minimize risk of injury to patients, self, and nearby individuals.

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\*Student Signature

Date

# CLINICAL LABORATORY SCIENCE PROGRAMS

## ACKNOWLEDGEMENT OF RESPONSIBILITY FOR HANDBOOK REVIEW

I have read and understand the Clinical Laboratory Science Student Policy Handbook Addendum. I acknowledge that I am responsible for reviewing and applying the information included therein.

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\*Student Signature

Date

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**PRINT** Student Name

Student ID Number (NSHE ID)