

CLEVELAND CLINIC SCHOOL OF HEALTH PROFESSIONS CATALOG

Cleveland Clinic School of Health Professions
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School of Health Professions Website

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GENERAL SCHOOL INFORMATION & POLICIES

CLEVELAND CLINIC

History

Cleveland Clinic was at the forefront of modern medicine when its founders opened it as a multi-specialty group practice in 1921. In its first century, Cleveland Clinic has introduced many medical firsts, opened facilities around the world, and is proud to be ranked among the top hospitals in the country. Now, 100 years later, the vision of the founders remains the same.

Mission

Caring for life, researching for health, and educating those who serve.

Care Priorities

Patients: *Care for the patient as if they are your own family.*

Cleveland Clinic is here for one reason: to take care of patients. We are known for exceptional care delivered by multidisciplinary teams. We challenge ourselves to get better each year. Our goals are to touch more lives, relieve suffering and provide every patient the best care and experience.

Caregivers: *Treat fellow caregivers as if they were your own family.*

There are nearly 60,000 Cleveland Clinic caregivers around the world. We are the largest employer in Northeast Ohio and the second largest in the state. We promote teamwork, inclusion, and integrity. We strive to make Cleveland Clinic the best place to work and grow.

Community: *We are committed to the communities we serve.*

Cleveland Clinic's community benefit goes beyond healthcare services. As an anchor institution, we promote the physical and economic health of our neighborhoods. We are building a future for health education and workforce development that will enhance the region for generations.

Organization: *Treat the organization as your home.*

Cleveland Clinic is a nonprofit organization. All revenues beyond expenses are reinvested in our mission. We care for the organization as if it were our home, by securing its financial health, using resources mindfully, and bringing our services to as many people as need our care.

Values

Quality & Safety: We ensure the highest standards and excellent outcomes through effective interactions, decision-making, and actions.

Empathy: We imagine what another person is going through, work to alleviate suffering, and create joy whenever possible.

Inclusion: We intentionally create an environment of compassionate belonging where all are valued and respected.



Integrity: We adhere to high moral principles and professional standards by a commitment to honesty, confidentiality, trust, respect, and transparency.

Teamwork: We work together to ensure the best possible care, safety, and well-being of our patients and fellow caregivers.

Innovation: We drive small and large changes to transform healthcare everywhere.

Commitment to Principles of Sustainability & Global Citizenship

As a leading healthcare organization committed to sustainability and transparency, we measure our progress in accordance with the UN Global Compact's Ten Principles, UN Sustainable Development Goals, and the Global Reporting Initiative standards. Through this report, we communicate progress on the environmental, social and governance issues deemed most significant by our patients, caregivers, communities, and global stakeholders. We look forward to continued collaboration and innovation with all of our valued stakeholders to promote public and environmental health.

Logo Statement

The hallmark used in the official Cleveland Clinic logo, developed in 1984, is the first official emblem for the Cleveland Clinic Foundation.



The four squares represent each of the major areas of the Foundation: Clinic, Hospital, Research and Education. They are also representative of our four founders: Frank E. Bunts, MD, George W. Crile, MD, William E. Lower, MD, and John Phillips, MD.

The large single square signifies unity and the efforts of all those involved to care for the sick, investigate their problems and further educate those who serve.

CENTER FOR HEALTH PROFESSIONS EDUCATION

Overview

In 2007, Cleveland Clinic recognized the importance of educating our future health professions caregivers by forming the Center for Health Professions Education (CHPE). The Center for Health Professions Education works with Cleveland Clinic's own internal education programs and with the external affiliated academic programs offered at educational facilities throughout Ohio and across the nation. In addition, we offer onboarding for health professions students, affiliation agreements with external academic institutions, and a multitude of other services related to the educational mission of Cleveland Clinic.

Mission

To promote an excellent learning experience for a diverse population of health professions students in the Cleveland Clinic health system so that they may become providers of the best care to patients as members of the interprofessional care team.

Vision

To facilitate the training of all health professions students across the Cleveland Clinic health system in order to provide uniformly excellent, equitable, and inclusive education through our internal and affiliate-based training programs for the benefit of our community and to help meet the workforce needs of the Cleveland Clinic health system.

CLEVELAND CLINIC SCHOOL OF HEALTH PROFESSIONS

Mission

Our mission is to foster an environment of excellence in education for a diverse population of health professions students. We are dedicated to providing comprehensive education that equips our students with the knowledge, skills, and values necessary to deliver the highest quality of patient care. Through innovative teaching methods, collaboration with world-class caregivers, and community engagement, we strive to develop healthcare professionals who are compassionate, competent, and committed to the advancement of health in the communities we serve.

Vision

Our Vision is to be a global leader in health professions education, where students and faculty alike can thrive and contribute to the advancement of healthcare worldwide. We strive to create a culture that values continuous learning, collaboration, and dedication to improving patient outcomes.

Objectives

1. Provide a curriculum that integrates clinical expertise and innovative teaching methods to ensure students are well-prepared for their future roles as healthcare professionals.
2. Cultivate a diverse and inclusive community that reflects the population served, ensuring that all students have the opportunity to learn in a supportive and respectful environment.
3. Offer ongoing professional development opportunities for faculty and students to foster a culture of continuous learning and improvement.
4. Instill a commitment to patient-centered care, emphasizing quality & safety, empathy, inclusion, teamwork, integrity, and the delivery of high-quality healthcare services.
5. Incorporate a global health perspective into the curriculum to prepare students for the challenges of providing care in a diverse and interconnected world.

Approvals

The Cleveland Clinic School of Health Professions is approved by the Ohio State Board of Career Colleges and Schools (OSBCCS) to offer and solicit students for authorized postsecondary education programs in the State of Ohio. Initial approval was granted on July 31, 2019 and approval is current through July 2026. School Registration Number: 2165. <https://scr.ohio.gov>.

The following programs within the School of Health Professions are approved through OSBCCS:

- Cardiac Ultrasound
- Cardiovascular Perfusion
- Computed Tomography (CT)
- Diagnostic Medical Sonography (Beachwood)
- Post-Primary Magnetic Resonance Imaging (MRI)

- Phlebotomy
- Primary Magnetic Resonance Imaging
- Radiologic Technology (Beachwood)

More information about these programs' approval can be found in the program-specific sections in this catalog.

Programmatic Accreditation

Cardiac Ultrasound

The Cardiac Ultrasound Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Joint Review Committee on Education in Cardiovascular Technology.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 113th Street N., #7709
Seminole, FL, 33775-7709
727-210-2350

Cardiovascular Perfusion

The Cardiovascular Perfusion Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Accreditation Committee-Perfusion Education.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 113th Street N., #7709
Seminole, FL, 33775-7709
727-210-2350

Cytology

The Cytology Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Cytology Programs Review Committee.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 113th Street N., #7709
Seminole, FL, 33775-7709
727-210-2350

Clinical Pastoral Education

The Clinical Pastoral Education Internship is accredited by The Association for Clinical Pastoral Education, Inc. (ACPE)

The Association for Clinical Pastoral Education, Inc.
1 Concourse Parkway, Suite 800
Atlanta, GA 30328
Phone: 404-320-1472
Website: www.acpe.edu

Diagnostic Medical Sonography (Mercy)

The Diagnostic Medical Sonography (Mercy) Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 113th Street N., #7709
Seminole, FL, 33775-7709
727-210-2350

Dietetic Internship

The Dietetic Internship Program is fully accredited through June 30th, 2026, by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), a specialized accrediting body recognized by the United States Department of Education. Recognition by USDE affirms that ACEND meets national standards and is a reliable authority on the quality of nutrition/dietetics education programs.

ACEND may be contacted at:

Accreditation Council for Education in Nutrition and Dietetics
Suite 2000
120 South Riverside Plaza
Chicago, IL 60606-6995
312-899-0040, ext 5400
<https://www.eatrightpro.org/acend>

Medical Dosimetry

The Medical Dosimetry Program is accredited by the:

Joint Review Committee on Education in Radiologic Technology
20 North Wacker Drive, Suite 2850
Chicago, IL 60606-3182
312-704-5300
Email: mail@jrcert.org

The program's current award is Probation. General program accreditation information and current accreditation award letter can be found [here](#).

Medical Laboratory Science

The Cleveland Clinic Medical Laboratory Science Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Further information can be obtained by contacting NAACLS at 5600 N. River Road, Suite 720, Rosemont, IL, 60018, by phone at 773-714-8880 or by visiting the NAACLS website at www.naacls.org.

Paramedic Education

The Paramedic Education Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs

727-210-2350

www.caahep.org

To contact CoAEMSP:

214-703-8445

www.coaemsp.org

The Paramedic Education Program is accredited by the Ohio Department of Public Safety.

Ohio Department of Public Safety

1970 W Broad St.

Columbus, OH 43223

844-644-6268

Phlebotomy

The Phlebotomy Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

5600 N. River Rd., Suite 720

Rosemont, IL, 60018-5119

773-714-8880

Primary Magnetic Resonance Imaging Program

The Primary Magnetic Resonance Imaging Program is accredited by the Joint Review committee on Education in Radiologic Technology:

Joint Review Committee on Education in Radiologic Technology (JR-CERT)

20 N. Wacker Drive, Suite 2850

Chicago, IL, 60606-3182

312-704-5300

Radiologic Technology (Beachwood)

The Radiologic Technology Program (Beachwood) is accredited by the Joint Review committee on Education in Radiologic Technology:

Joint Review Committee on Education in Radiologic Technology (JR-CERT)

20 N. Wacker Drive, Suite 2850

Chicago, IL, 60606-3182

312-704-5300

Radiologic Technology (Mercy)

The Radiologic Technology Program (Mercy) is accredited by the Joint Review committee on Education in Radiologic Technology:

Joint Review Committee on Education in Radiologic Technology
20 North Wacker Drive, Suite 2850
Chicago, IL 60606-3182
312-704-5300
Email: mail@jrcert.org

The program's current award is Administrative Probation. General program accreditation information and the current accreditation award letter can be found [here](#).

CLEVELAND CLINIC SCHOOL OF HEALTH PROFESSIONS ADMINISTRATION

Executive Leadership

Chief of Education, James Stoller, MD, MS

Academic Affairs

Dean: Mari Knettle, DPT, EdD, FASAHP

Operations

Senior Director: Michelle Hrehocik, MBA

Administrative Units

Registrar: Doneisha Taylor-Smith, MBA

Assessment and Career Services: TBD

Documentation and Quality: Cheryl Stashinko, MLIS

Student Records: Patrick Svihlik, MEd

Student Services

Assistant Dean of Student Affairs: Rachel King, JD

Student Affairs and Alumni Relations: Randi Myers, MAEd

ACADEMIC CALENDAR

ACADEMIC YEAR 2024-2025

Date	Calendar Description
Monday, January 1, 2024	New Years Day 2024
Monday, May 27, 2024	Memorial Day 2024
Thursday, July 4, 2024	Independence Day 2024
Monday, September 2, 2024	Labor Day 2024
Tuesday, September 17, 2024	*Constitution Day 2024
Thursday, November 28, 2024	Thanksgiving Day 2024
Wednesday, December 25, 2024	Christmas Day 2024
Wednesday, January 1, 2025	New Years Day 2025
Monday, May 26, 2025	Memorial Day 2025
Friday, July 4, 2025	Independence Day 2025
Monday, September 1, 2025	Labor Day 2025
Wednesday, September 17, 2025	*Constitution Day 2025
Thursday, November 27, 2025	Thanksgiving Day 2025
Thursday, December 25, 2025	Christmas Day 2025
<i>*While recognized, SOHP will not be closed on Constitution Day. Students are to report to class and/or clinical sites.</i>	

The above holidays are recognized by Cleveland Clinic and reflect days that the School of Health Professions will be closed. Students are not scheduled for educational or clinical activities on these days and are not permitted to be at a clinical site during scheduled holidays.

If the actual holiday falls on a Saturday, the holiday will be observed on the preceding Friday. If the actual holiday falls on a Sunday, the holiday will be observed on the following Monday. All others will observe the holiday on the actual date.

Please refer to each program's section in this catalog for specific program academic calendar information. This can include start and end dates for each term, program planned breaks, tuition refund dates, tuition payment dates (if applicable), final exam weeks, and graduation.

EDUCATIONAL FACILITIES

Main Campus



Cleveland Clinic Main Campus

Cleveland Clinic Main Campus

9500 Euclid Ave.
Cleveland, OH 44195

Programs: Cardiac Ultrasound, Cardiovascular Perfusion, Clinical Pastoral Education Internship, Cytology, Dietetic Internship, Medical Dosimetry, Medical Laboratory Science

Since 1921, the Main Campus of Cleveland Clinic spans over 165 acres in the Fairfax neighborhood. The Main Campus has approximately 1,400 beds and welcomes over 1.5 million patients per year, making it one of the largest hospitals in the United States. The Clinic offers specialty care in cardiology, heart

surgery, urology, gastroenterology, and cancer care. Regularly ranked among the top 5 hospitals in the U.S. by the U.S. News & World Report, Cleveland Clinic serves as a pioneer in research, innovation, technology, and global health.

Separate Educational Centers

Akron General

1 Akron General Ave.
Akron, OH 44307

Programs: Paramedic Education

Founded in 1914 as Peoples Hospital, Cleveland Clinic Akron General is a not-for-profit healthcare organization that serves as the hub for Cleveland Clinic's Southern Region. In addition to a 532-registered-bed teaching and research medical center in downtown Akron, the Cleveland Clinic Akron General system includes:

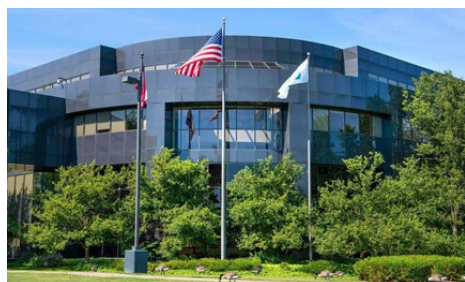


Akron General

- Lodi Hospital, a critical access hospital, offers a comprehensive range of services, including a 24-hour Emergency Department, outpatient surgery and a full range of diagnostics, rehabilitation and physical therapy, as well as acute and skilled care.
- Health & Wellness Centers, located in Bath, Green and Stow, offer a variety of integrated outpatient services, including 24-hour Emergency Departments, primary and specialty care practices, as well as a medically supervised exercise program.

Cleveland Clinic Administrative Campus (CCAC)

Building 2
25900 Science Park Dr.
Beachwood, OH 44122



CCAC, Building 2

Programs: Diagnostic Medical Sonography (Beachwood), Post-Primary Computed Tomography (CT) and Magnetic Resonance Imaging (MRI), Primary Magnetic Resonance Imaging (MRI), Radiologic Technology (Beachwood)

Cleveland Clinic Administrative Campus, located in Beachwood, Ohio consists of 5 buildings. The campus offers outpatient care in a variety of specialties. Additionally, a multitude of administrative departments are located at this campus, including human resources, talent acquisition, protective services, law department, occupational health, badging and more. Programs related to Diagnostic Imaging are also hosted at this site, complete with didactic and lab-based classrooms, meeting and lounge space, and computer labs.

Lutheran Hospital

2706 Franklin Blvd.
Cleveland, OH 44113

Programs: Phlebotomy

Lutheran Hospital is a 203-bed acute-care facility offering sophisticated technology and advanced medical care within an intimate and friendly environment. The hospital provides leading-edge treatments and advanced research and surgery, with specialties in Orthopaedics and Spine, Behavioral Health, and Chronic Wound Care



Firehouse, Lutheran Hospital

Mercy Hospital

1320 Mercy Dr. NW
Canton, OH 44708



Mercy Hospital

*Programs: Diagnostic Medical Sonography (Mercy),
Radiologic Technology (Mercy)*

Cleveland Clinic Mercy Hospital became a full member of the Cleveland Clinic health system on Feb. 1, 2021, and is sponsored by the Sisters of Charity of St. Augustine. Founded in 1908, the Catholic faith-based medical center operates a 476-bed hospital in Canton and outpatient locations in Alliance, Carroll County, Jackson Township, Lake Township, Louisville, Massillon, North Canton, Plain Township and Tuscarawas County.

Mercy Hospital has 620 members on its Medical Staff and employs 2,800 caregivers. Mercy received an “A” in the most recently published safety grades by the Leapfrog Group.

University of Akron Wayne College

1901 Smucker Rd.
Orrville, OH 44667

Programs: Paramedic Education

Built in 1972, the University of Akron Wayne College includes the library, state-of-the-art computer labs, classrooms and laboratory space, staff and faculty offices, as well as a 160-seat tiered auditorium. The campus serves as an educational and cultural hub for Wayne County and the surrounding region.



University of Akron Wayne College

PROGRAM DELIVERY

Programs may be offered in a traditional residential or blended distance education format. Both residential and blended distance education programs may use MyLearning, a learning management system used across Cleveland Clinic. Microsoft Teams is used for live, didactic course delivery and meeting with students. Regardless of delivery method, students should familiarize themselves with MyLearning and be aware of how they are expected to use the system for learning purposes for each

course in which they are enrolled. Refer to the Technology Requirements portion under Admissions Requirements and Procedures in this catalog to learn more about minimum and recommended technology requirements for MyLearning and Teams.

Residential Format

Students enrolled in residential programs attend in-person, live didactic and lab-based classes and clinical experiences during scheduled days and hours.

Blended Distance Education Format

Students enrolled in blended distance education programs attend both in-person, live classes and complete some coursework online. In-person classes will meet at scheduled days and hours posted by the program and students should be aware of expectations for completing and participating in online coursework and discussions as outlined by the program.

MyLearning

MyLearning is a Learning Management System (LMS) that is built on Totara. Totara is an LMS that extends upon the core structure of Moodle. MyLearning allows educators to create dynamic online courses and learners to interact with course content, other learners, and the course facilitator. Courses designed, developed, and delivered on MyLearning are accessible on all mobile devices for most courses.

Support is available to students experiencing issues with a course or logging in to MyLearning, as well as general tips on how to use and navigate the learning platform by visiting the [Learner Support tab](#). Here students will find helpful videos, handouts, and FAQs. Students may also contact the cTEKI Help Desk at elarning@ccf.org.

Microsoft Teams

Distance education courses that include a live lecture component utilize Microsoft Teams as the platform of delivery. Students enrolled in such courses must have a working web camera and microphone to effectively participate in live discussions.

ADMISSIONS REQUIREMENTS AND PROCEDURES

This section describes universal requirements and procedures for applicants to all School of Health Professions programs. Applicants should be aware that programs may have additional admission requirements outlined in each program's portion of this catalog.

Accommodation Requests Applicants/Students with Disabilities

Applicants and enrolled students with a disability, who are pregnant or have a related medical condition may request reasonable accommodations during the admissions process or anytime during their course of study by contacting the Program Director of the program for which they are applying or enrolled.

To request a reasonable accommodation, individuals should contact the Program Director as early as possible. Medical documentation of an individual's disability and functional limitations may be required to determine eligibility for accommodations. Generally, documentation of pregnancy is not required. The program and student may meet to discuss whether a reasonable accommodation is necessary and

available and, upon determining that accommodations have been identified, the student will receive a written letter outlining those accommodations.

Reference: [Procedure to Address Requests for Reasonable Accommodations in Education](#).

Advanced Placement

SOHP does not offer advanced placement in its programs through exams, achievement tests, or credit for experiential learning.

Application Procedures

Program applications and supplemental documents are submitted electronically through the Student Information System (SIS), Campus Café, with the exception of the Dietetic Internship program applicants who will follow the application process required by the Accreditation Council for Education in Nutrition and Dietetics (ACEND).

Each program establishes its own admission and application procedures, including dates in which applications are accepted. Please refer to the program-specific admission and application procedures in this catalog.

Background Check

All accepted students are required to undergo a criminal background check during the onboarding process. A positive finding does not necessarily mean that the individual is unable to participate in the program. If a background check yields a positive finding, the School of Health Professions will consult with Cleveland Clinic Protective Services to determine whether the student will be permitted to participate in the education program for which they are enrolled. Students must be cleared by Cleveland Clinic Protective Services for badging and clinical participation.

Discovery by the program of any unfavorable information (including information about arrests or convictions) obtained in the background check that has not been previously disclosed in writing may be grounds for immediate dismissal from the program and forfeiture of all tuition. Any student who is arrested or convicted of a crime during the program, must report the arrest or conviction to the Program Director within 3 business days. Students should speak with the Program Director to learn more about disclosure of arrests and convictions and the impact to one's ability to continue in the program and future employment. Criminal history may impact ability to become credentialed or to obtain employment in a career field regardless of completing the educational program.

Reference: [Internal Health Professions Education Program Student Background Check SOP](#)

Drug Screen

For most SOHP programs, drug testing is not a requirement for admission. Applicants should be aware that this policy may change at any time. Those interested in applying to a program should carefully review the program-specific section of this catalog to learn about specific drug screen requirements for that program.

Health Insurance

All students enrolled in a program under the School of Health Professions are expected to be covered by health insurance for their entire duration of training and are responsible for obtaining and covering the

cost associated with coverage. Students are responsible for medical expenses related to disease or injury incurred that are not covered by health insurance.

Instructional Language

Program instruction within the School of Health Professions occurs in English. SOHP does not offer English as a Second Language (ESL) instruction. Applicants whose native language is not English may be required to submit scores on the Test of English as a Foreign Language (TOEFL) or International English Language Testing Service (IELTS) as part of the admission process. Program-specific requirements are provided in program sections of this catalog. Applicants will be provided with the SOHP DI code to submit TOEFL scores during the admissions process.

International Applicants

Cleveland Clinic and the School of Health Professions are unable to sponsor visas for international learners.

Late Enrollment

The School of Health Professions does not allow late enrollment into any of its programs.

Liability Insurance

Students enrolled in the Cleveland Clinic School of Health Professions are covered under Cleveland Clinic's general liability insurance when participating in activities that constitute a part of their educational program. Students may choose to purchase additional student professional liability insurance coverage from a provider of their choosing and at their own expense. Student policies are generally available at low cost. Cleveland Clinic does not endorse any particular insurance provider for students who choose to secure their own policy.

Minimum Education Requirements for Admission

All applicants must be 18 years of age or older and possess a minimum of a high school diploma or GED. Some programs may have additional post-secondary education and certification requirements for admission. Those interested in a program should carefully review additional admissions requirements in the respective program's portion of this catalog.

Applicants are required to provide proof of education and/or certification upon applying to a program. An official transcript must be submitted to show evidence of graduation and will include the name of the institution, city, state, and graduation year.

Readmission Policy

Students who withdraw from SOHP while in good academic standing may reapply for admission to SOHP. Students who are readmitted to a program must meet the matriculation and graduation requirements in place at the time of the readmission.

Students who wish to reapply for admission to SOHP after an academic dismissal must meet with the Program Director of the program to which they are applying for advisement. The Program Director will explain readmission criteria (if applicable) and graduation requirements applicable at the time of reapplication and will assist the student with formulating a plan for academic success if readmitted. The student must also meet with the SOHP Registrar to discuss applicable Satisfactory Academic Progress (SAP) requirements for the individual student's situation prior to applying for readmission.

Students are not eligible to reapply for admission after a non-academic dismissal.

Students who wish to reapply for admission to SOHP after a non-academic dismissal are generally not eligible to reapply for admission to SOHP. Students wishing to apply for readmission after a non-academic dismissal may petition for readmission after one year from the date of dismissal by submitting a letter of petition addressed to the readmissions committee. The letter must include a plan for successful remediation of deficiencies leading to the initial dismissal. The letter must also be accompanied by a statement of support for the students' readmission from a faculty member of the program to which the student is reapplying. Letters of petition must be received at least 90 days prior to the application deadline of the program to which the student wishes to enter. Petition submission does not guarantee readmission.

Individual programs may have additional restrictions on readmission due to the nature of the individual program and programmatic accreditation requirements.

Technology Requirements

To be successful, students must possess basic skills proficiency with technology and have access to a computer (desktop or laptop) with the minimum system requirements below.

Operating Systems

- Windows 10 and newer
- MacOS-based devices are not recommended

Mobile Operating Systems

- iOS 15 or newer

Processor

- Minimum Intel i5 10th generation (five-digit number after i5 starts with 10)
- Recommended Intel i5 11th generation (five-digit number after i5 starts with 11)

Hard Drive

- Minimum 256GB (can be traditional spinning disk or SSD)
- Recommended 512GB

RAM

- Minimum 8GB
- Recommended 16GB

Internet Speed

- Minimum of 512kbps

Other Features

- Web camera and microphone recommended (required for students enrolled in distance education courses with a live lecture component)

Please see program-specific information in this catalog for additional program requirements.

Transfer Credit for Previous Education and Transferability of Credits

Credits earned at Cleveland Clinic's School of Health Professions (SOHP) may not transfer to another educational institution. SOHP reserves the right to accept or reject any or all credits earned at prior educational institutions regardless of accreditation status or subject relatability. You should obtain confirmation that SOHP has evaluated credits you have earned at another educational institution before you execute an enrollment contract or agreement. You should also review the *transfer of credits policy* of any educational institution that you may want to transfer credits earned at SOHP. Be sure to have a transfer credit evaluation prior to executing an enrollment contract or agreement. The ability to transfer credits from SOHP to another educational institution may be very limited. Some or all credits may not transfer, and you may have to repeat courses at another educational institution that were previously taken at SOHP. Never make the assumption that credits will transfer to or from any educational institution. It is strongly advised to review and understand the *transfer of credit* policy of SOHP and of any other educational institutions you plan to attend before you execute an enrollment contract or agreement.

SOHP has developed articulation agreements with many academic institutions for various programs. The clinical hours contracted to transfer as credits to the academic institutions are outlined within each articulation agreement. For program specific information, visit the SOHP website.

GRADUATION REQUIREMENTS

Certificates for each SOHP program are awarded based on the successful completion of all graduation requirements for each program. Details regarding each program's graduation requirements are provided in the program-specific section of this catalog. All SOHP matriculation programs require students to maintain Satisfactory Academic Progress, as outlined in this catalog.

All matriculated students are required by SOHP to complete an exit interview prior to graduation.

A hold on issuing final official transcripts will be applied to students with an outstanding financial balance with the School of Health Professions (this does not include educational loans to third-party lenders).

Return of Equipment

All Cleveland Clinic-owned educational technology (i.e. laptops) and other items provided to enrolled students must be returned to the program upon completion of or withdrawal from the program. Students should check with the Program Director of the program in which they are enrolled to confirm items in need of return. Please check the program-specific section of this catalog to learn about consequences of failure to return equipment.

STUDENT RIGHTS AND RESPONSIBILITIES

Anti-Hazing Policy

Cleveland Clinic has adopted a [Student Anti-Hazing Policy](#) which prohibits hazing, defined as, "doing any act or coercing another, including the victim, to do any act of initiation into any student or other organization

or any act to continue or reinstate membership in or affiliation with any student or other organization that causes or creates a substantial risk of causing mental or physical harm to any person, including coercing another to consume alcohol or a drug of abuse.” Incidents of hazing should be reported to your program leadership.

Reference: [Student Anti-Hazing Policy](#)

Attendance

Attendance and active participation in all aspects of the program are essential to student success. Failure to adhere to attendance-related policies can negatively impact grades and progress in a program up to and including dismissal. Students enrolled into clock hour programs are required to complete **all** specified clock hours to successfully complete their program of study. Refer to the specific program sections for number of clock hours required for completion. Program attendance can vary depending on the delivery method of the required clock hours. While the following attendance-related policies are universal to all SOHP programs, students should carefully review requirements and procedures of the program in which they are enrolled. This information can be found in the program-specific portion of this catalog.

Bereavement

Students are permitted up to three (3) days off for documented evidence of death of immediate family member. At the discretion of the program, documentation may be required, including an obituary notice, proof of relationship and proof of funeral dates

Immediate family includes:

- Current Spouse
- Parent
- Step-Parent
- Parent-in-Law
- Child
- Grandparent
- Grandchild
- Sibling
- Step-Sibling

Students are responsible for any missed assignments and must make arrangements with their instructor to make up exams and assignments within one week of returning from bereavement. Students are not penalized for late assignments.

Jury Duty

Upon request of the student, the registrar's office can provide proof of enrollment to support a petition to the court to be excused from jury duty. A student serving jury duty will receive an excused absence with documented proof of jury service.

Leave of Absence

SOHP programs may, at their sole discretion, grant leaves of absence for up to one year for students with medical, family, or emergency conditions. Leaves of absence must be approved by the Program Director of the program in which a student is enrolled. Leaves of absence related to a disability or pregnancy accommodation are covered under section [ADA and pregnancy accommodation section].

Students must complete a Leave of Absence form and submit it to the Program Director. This should be submitted at least two weeks in advance, if possible. Verification is generally required. There are no additional charges incurred for extending the length of the program due to an approved leave of absence.

Students on a leave of absence (LOA) must make up all course work, didactic and clinical, once they return from leave and before graduation. See attendance policy for make-up time specifics. Course work covered during most semesters is provided only once a year, therefore it is not always possible to reenter a program within one year of taking a LOA.

Students on an LOA are required to speak with the Program Director at least two weeks prior to the petitioned return date in order to plan for their return. The student and Program Director will develop an academic plan that includes makeup work and hours needed to re-establish academic progress toward completion of the program.

If a student is on a medical leave of absence, they may be required to submit information from their provider that they are able to return to their program or requesting accommodations in order to be able to return. Students are not allowed to return to their clinical site until this form is submitted and approved by the Program Director.

Military Duty

The School of Health Professions will grant leave to students who are called to active military duty without penalty to admission status. When a student is notified of military duty, they should contact the Program Director immediately. The Program Director will coordinate procedures for arranging a leave of absence and returning to their program upon completion of the military assignment. The Program Director will submit the necessary LOA paperwork to the office of the registrar to include with the student's record.

Students must provide a copy of their military orders in order to request a leave of absence for military reasons.

Code of Conduct

As future healthcare professionals, students are expected to conduct themselves appropriately and in a professional manner at all times. In addition to performing under the ethical standards of their program, students must comply with directives of school officials, faculty, clinical supervisors, and preceptors. Failure to uphold academic and professional standards may result in dismissal from the SOHP program.

Reasons that students may be disciplined include (but are not limited to) the following:

- Academic dishonesty including but not limited to cheating, plagiarism, illegal copying and failing to report incidences of academic misconduct of others (See Academic Integrity section of this catalog)
- Failure to comply with the attendance policy (See Attendance Policy section of this catalog)
- Failure to comply with dress code and expectations for professional appearance
- Breach of hospital confidentiality and/or HIPAA regulations
- Compromising the safety of patients
- Illegal possession or the use of, or intoxication from any substance that potentially alters one's ability to function during any learning or clinical experience (See Substance Abuse section of this catalog)
- Failure to comply with Cleveland Clinic or SOHP policies and procedures, or state or federal laws.
- Disrespectful or insubordinate behavior towards a clinical supervisor, faculty or any member of the healthcare team

- Failure to comply with the direction and commands of faculty, clinical supervisor, or any member of the healthcare team
- Theft
- Falsification of records
- Using language which is abusive, slanderous, derisive or inflammatory in interactions with patients, peers, staff, faculty and the general public.
- Failure to respect the rights and duties of others in the classroom, clinical settings and meetings within the School of Health Professions
- Dismissal from a clinical site

Dismissal

Generally, progressive discipline will be imposed. However, a serious infraction may result in immediate dismissal from a program. Serious infractions or repeated incidences will be reviewed by the Program Director and the Dean of SOHP and could result in immediate dismissal from the program. Programs have the right to immediately suspend a student pending investigation of a possible infraction.

Withdrawal Policy

Official withdrawals must be submitted by the student through the student information system (SIS). The date the student withdraws through the SIS is considered the date of determination. The amount of tuition and fees to be charged for the student's enrollment into the program through the withdrawal date is determined by the Tuition Refund Policy.

Unofficial withdrawals can be made by the Program Director or School of Health Professions Registrar. The Program Director or Registrar reserves the right to withdraw the student from the program for violation of the attendance and/or academic policies. The unofficial withdrawal will follow the same Tuition Refund Policy as the official withdrawal by the student.

For official and unofficial withdrawals, the last date of attendance is used to determine the federal financial aid refund. The last date of attendance is recorded for all students that have withdrawn from any School of Health Professions program. The last date of attendance will be considered as the last date that the student actively participated in any required clock hour for the program.

Confidential Information

During the course of training, students may have access to confidential information concerning CCF budgets, strategic business plans, patients, or employees. This information may be in the form of verbal, written, and/or computerized data.

The protection of this confidential information is critical. As such, the unauthorized acquisition, release, and/or discussion of any information related to CCF business, patient medical information, current and past employees, job applicants and computerized data is considered a major infraction, subject to disciplinary action up to and including being dismissed from the program.

As a reminder of students' responsibility to protect and adhere to policies surrounding confidential information, all students electronically sign-off on their commitment to these matters during the onboarding process.

Employment During Program

SOHP programs are rigorous, intensive educational programs meant to prepare students for employment in a health professions field. Programs vary in length and may require students to be available up to 40

hours a week for educational and clinical activities. Students should understand the demands and expectations of the program in which they are enrolled. Students are encouraged to speak with the Program Director to learn about expectations for students related to employment while enrolled.

FERPA (Family Educational Rights and Privacy Act)

Pursuant to the Cleveland Clinic School of Health Professions' (SOHP) Family Educational Rights and Privacy Act (FERPA) Policy (the "Policy"), the following notice is provided to SOHP students. Terms used in this notice have the definitions set forth in the Policy.

Participants in SOHP educational programs and activities who are enrolled as students in an affiliated educational institution should refer to their educational institution's FERPA notice for information regarding how to access their education records. SOHP shall cooperate with affiliated institutions to provide education records as required under the applicable affiliation agreement and applicable law and regulation.

FERPA affords students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student's education records within forty-five (45) days after the day SOHP receives a request for access. A student should submit to the Registrar a written request that identifies the record(s) the student wishes to inspect. The Registrar will make arrangements for access and notify the student of the time and place where the records may be inspected.
2. The right to request the amendment of the student's education records when the student believes the record is inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA.

A student who wishes to ask SOHP to amend a record should submit a written request to the Registrar, clearly identifying the part of the record the student wants changed and specifying why it should be changed.

If SOHP decides not to amend the record as requested, SOHP will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to provide written consent before SOHP discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent.
4. SOHP discloses education records without a student's prior written consent under the FERPA exception for disclosure to SOHP or Cleveland Clinic officials with legitimate educational interests. For the purposes of FERPA, a SOHP official is any Cleveland Clinic employee working in a health professions education program; a person serving on any health professions education board or advisory committee; a student serving on an official committee; and a volunteer or contractor outside of SOHP who performs a function for which SOHP would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records. An SOHP official typically has a legitimate educational interest if the official needs to review an education record in order to fulfill their professional responsibilities.

Upon request, SOHP also discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

5. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Cleveland Clinic or SOHP to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202

FERPA permits the disclosure of PII from students' education records without consent of the student if the disclosure meets certain conditions found in the FERPA regulations. SOHP is required to maintain a record of disclosures, except for disclosures to school officials, disclosures related to some judicial orders or lawfully issued subpoenas, disclosures of directory information, and disclosures to the student. Students have a right to inspect and review the record of disclosures.

Directory Information

FERPA also permits the disclosure of appropriately designated "directory information" without written consent. SOHP has designated the following information as directory information:

- Student's name
- Address
- Telephone listing
- Electronic mail address
- Photograph
- Date and place of birth
- Program/field of study
- Dates of attendance
- Current year of study
- Participation in officially recognized activities
- Degrees, certificates, honors, and awards received
- The most recent educational institution attended prior to entering their current program
- Cleveland Clinic ID number

If you do not want SOHP to disclose any or all of the types of information designated above as directory information without your prior written consent, you must notify the Registrar in writing at SOHPRegistrar@ccf.org.

Students requesting release of or access to their records must complete and submit the [FERPA Release Authorization form](#) or by contacting the Registrar at SOHPRegistrar@ccf.org.

Identification Badges

Identification badges are issued to all learners upon the completion of student onboarding. Badges are issued in an effort to promote safety and used to provide access to educational spaces and parking, timekeeping, distinguish between employee and non-employees, and identify individuals in the case of an emergency.

Students must wear their issued badge at all times while on Cleveland Clinic property and any other sites in which they are participating in educational activities. As with other non-employees, student badges are blue. For instances in which a student is also an employee of Cleveland Clinic, the student should be sure to present with their blue badge when on site as a learner.

To obtain an identification badge, students must bring one of the following forms of photo ID (Driver's License, Passport, State ID) to the Cleveland Clinic ID Badge location as instructed during onboarding. Badges must be obtained prior to the first day of class.

Students who have received a badge in the past and have not yet turned it in to Cleveland Clinic, must bring the old badge with them to exchange it for a new one. Students will be charged \$30.00 for a replacement if the old badge is not returned at the point of obtaining a new badge. Badge fees must be paid with Credit Card only (No Cash). Students who are scheduled to complete an additional clinical rotation at Cleveland Clinic should keep their student ID badge until the end of their final clinical rotation at Cleveland Clinic.

Reference: [Identification Badge Policy](#)

Letters of Recommendation

To request a letter of recommendation from a Program Director or faculty member, a student must fill out and submit the Student Request for a Letter of Recommendation or Verbal Reference form. It is recommended that this form be submitted four weeks in advance of the due date. If it is submitted within two weeks of the due date, completion of the letter is not guaranteed. Program Directors and faculty reserve the right to deny any request for any reason.

Non-Discrimination Statement

Cleveland Clinic is committed to providing a working and learning environment in which all individuals are treated with respect and dignity. It is the policy of Cleveland Clinic to ensure that the working and learning environment is free from discrimination or harassment on the basis of race, color, religion, gender, sexual orientation, gender identity, pregnancy, marital status, age, national origin, disability, military status, citizenship, genetic information, or any other characteristic protected by federal, state, or local law. Cleveland Clinic prohibits any such discrimination, harassment, and/or retaliation.

Any participant in a Cleveland Clinic educational program, including any student, trainee or employee, who may have been subject to discrimination on the basis of a protected characteristic is encouraged to make a report to the Title IX Coordinator: TitleIX@ccf.org.

Non-Smoking Policy

Students must comply with Cleveland Clinic's commitment to a smoke-free campus. Therefore, using any smoke-producing products (including but not limited to cigarettes, e-cigarettes, cigars, pipes and vaporizers (aka "vapes"), or the usage of any tobacco products is prohibited on all Cleveland Clinic owned and leased properties and private property adjacent to the facilities.

Reference: [Non-Smoking Policy \(Smoke-Free Campus\)](#)

Dress/Professional Appearance

While engaging in educational activities at Cleveland Clinic or an external site, students are expected to demonstrate safety and professionalism in behavior and appearance. Students should be aware of dress and appearance requirements specific to their program or clinical site, including whether they are required to wear uniforms/scrubs or business casual attire. These requirements promote student and patient safety, as well as promote inclusion for our students and patients.

At minimum, students should be aware of the following requirements:

1. Hair styles (including facial hair), jewelry, makeup and fingernail lengths should be appropriate to their program.
2. Shoes should be appropriate for the work being performed and the location/site. Some departments may permit athletic shoes with uniforms.
3. Tattoos that convey messages that are inconsistent with SOHP values must be covered at all times.
4. Hats or other headwear should be worn only if they are part of the approved uniform.
5. Prohibited attire includes, but is not limited to:
 - Attire with political endorsements.
 - Attire that is vulgar, obscene, threatening, intimidating or harassing.
 - Attire that conveys a message contrary to Cleveland Clinic's policies against discrimination or harassment.
 - Attire that provokes a debate over social issues.

Reference: [Professional Appearance Policy](#)

Social Media

While engaging in educational activities, students should limit the use of social media as to not interfere with learning.

Additionally, students must adhere to the social media usage policies described below:

1. In the interest of guarding the privacy of patients, students must not publish any content – including photos, names, likenesses, descriptions or any identifiable attributes or information – related to any Cleveland Clinic patient on any form of social media or to any third party. Postings that attempt to describe any specific patient and/or patient care situation, or that contain any patient identifier, or in combination with other information may result in identification of a particular patient directly or indirectly, are inappropriate and strictly prohibited.
2. Students should never use SOHP or Cleveland Clinic's name, logo, trademark, or any other brand elements as to avoid being perceived as representing the School or Clinic.

3. Students should not post images of other students or Cleveland Clinic employees without permission.
4. Student must not post content on any social media site that is related to confidential or proprietary information of SOHP or Cleveland Clinic, its patients, or vendors, such as health information or trade secrets.
5. Do not use a Cleveland Clinic-issued email address to register for any personal social media accounts or sites.
6. Students must not use SOHP or Cleveland Clinic-sponsored social media or sites to solicit for or promote personal businesses or other organizations, including but not limited to outside business ventures, charities, political campaigns, or religious groups.
7. If a student's social networking (including but not limited to their online profile) includes any information related to SOHP or Cleveland Clinic, the student must not represent in any way that the employee is speaking on behalf of SOHP or Cleveland Clinic.

Reference: [Social Media Use Policy](#)

Substance Abuse

The School of Health Professions and Cleveland Clinic are committed to maintaining a safe, drug-free learning environment for its students, trainees, employees, patients and visitors. All students may be subject to urine and/or breath testing when reasonable suspicion exists that the student is in an impaired condition and/or under the influence of drugs and/or alcohol on Cleveland Clinic premises. A reasonable suspicion of impairment exists: (1) when the student exhibits aberrant behavior and/or the type of behavior that shows symptoms of intoxication or impairment caused by drugs and/or alcohol; and (2) the behavior cannot reasonably be explained by other causes. Students may be subject to an appropriate search on Cleveland Clinic premises when reasonable suspicion exists that a student is in improper possession of alcohol, illegal drugs and/or a controlled substance or may have diverted a controlled substance.

Reference: [Student Substance Abuse Policy](#)

Telephone and Cellular Phone Usage

While engaging in educational experience, students are responsible for doing their part to ensure a quiet, professional, healing environment for patients and protecting confidentiality by avoiding personal calls or engaging in non-work-related conversations. Cleveland Clinic issued phones are reserved for business purposes only. Personal cell phones must remain on silent or vibrate, and students should avoid excessing calls, texting, social media activity, and accessing the internet while on site.

Reference: [Telephone and Cellular Use Policy](#)

Transportation

Students are responsible for their own transportation to participate in educational activities. Parking will be provided by the Cleveland Clinic Foundation at no cost to the student. All other transportation costs are the responsibility of the student. To learn more about student parking, please review the Parking section under Student Services.

Weapons and Contraband Policy

SOHP students are not permitted to bring firearms or weapons into any Cleveland Clinic-owned or leased properties. Students should be advised that Carry Concealed Weapons Permits from Ohio or any other state, local, or law that allows the carry of weapon without a permit, do not authorize individuals to carry a firearm or weapon inside any Cleveland Clinic-owned or leased premises. Any item determined by hospital staff to be hazardous or that may unduly violate the privacy of other patients may be classified as contraband. If any item or substance is suspected of being contraband, it is to be reported to Police/Security authority immediately.

Violations of this policy will result in mandatory termination and/or prosecution.

Reference: [Weapons and Contraband Standing Operating Procedure](#)

Visitation of Students

Visitation of students while engaging in educational activities is strongly discouraged. Students are responsible for advising family members and friends not to visit the workplace and for limiting the duration of those personal visits that are unexpected or outside of the student's control. Exceptions to this policy require authorization of the Program Director and are expected to minimize disruption to the workplace. In no case will visitors be permitted in areas where direct patient care is occurring.

FINANCIAL RIGHTS AND RESPONSIBILITIES

Tuition Refund Policy

If a student is not accepted into the program, withdraws, or is dismissed, all efforts will be made to refund pre-paid amounts for books, fees, and supplies. The refund policy does not apply to items that were ordered specifically for the student or if the items were returned in a condition that prevents them from being used by or sold to another student. Additionally, the refund policy does not apply to individually documented non-refundable fees for goods or services provided by third party vendors.

Refunds shall be based upon the date of the student's official withdrawal through the student information system (SIS), or date of program determination (unofficial withdrawal due to absences or other criteria as specified in the school catalog). The school shall make the appropriate refund within 30 days of the date the school is able to determine that a student has withdrawn or has been terminated from a program.

Eligibility to receive refunds for tuition and applicable fees shall be determined as outlined below:

- (1) A student who withdraws before the first class and after the 5-day cancellation period shall be obligated for the registration fee.
- (2) A student who starts class and withdraws before the academic term is 15% completed will be obligated for 25% of the tuition and refundable fees plus the registration fee.
- (3) A student who starts class and withdraws after the academic term is 15% but before the academic term is 25% completed will be obligated for 50% of the tuition and refundable fees plus the registration fee.
- (4) A student who starts class and withdraws after the academic term is 25% complete but before the academic term is 40% completed will be obligated for 75% of the tuition and refundable fees plus the registration fee.
- (5) A student who starts class and withdraws after the academic term is 40% completed will not be entitled to a refund of the tuition and fees.

For programs that are approved by the Ohio State Board of Careers Colleges and Schools (OSBCCS) (School Registration No. 2165), additional parameters regarding refunds may apply. [Click here](#) for details.

Programs approved by OSBCCS include Cardiac Ultrasound, Cardiovascular Perfusion, Computer Tomography, Diagnostic Medical Sonography (Beachwood), Phlebotomy, Post-Primary Magnetic Resonance Imaging, Primary Magnetic Resonance Imaging, and Radiologic Technology (Beachwood). The Beachwood Radiologic Technology program, which is approved for Title IV funding, considers the student's last date of attendance for the calculation of federal financial aid refunds. The last date of attendance is based on the student's last date of participation in any required clock hour delivery

Student Account Collections Policy

The Cleveland Clinic School of Health Professions' (SOHP) office of the Registrar uniformly administers tuition and fee charges to students. Students agree to pay the total tuition and fees administered at the time of enrollment into the program. Additional payment arrangements may be agreed upon by the office of the Registrar, the Program Director, and the student. In the event of a balance owed to SOHP after a student leaves the program, via graduation, withdrawal, or termination, the following collection procedures will be enforced.

- A. The student account will be thoroughly reviewed at the time of the student's separation from the SOHP by the office of the Registrar to ensure accuracy and resolve any inaccuracies.
- B. The office of the Registrar will notify the holder of the student account via email and/or telephone of the remaining balance owed. The email notification will include how to remit payment through Momentus, which will also be electronically transmitted to the system of record, Campus Café.
- C. Collection activity through SOHP will continue on a bi-weekly basis for a duration of 12 months if applicable.
- D. Student account balances that remain unpaid beyond the 12-month period after separation from SOHP will be turned over to the collection agency utilized by the parent company, Cleveland Clinic, which is Revenue Group

Federal Financial Aid

The Radiologic Technology Program (Beachwood) participates in federal financial aid programs. To be considered for financial assistance, a student must complete a free application for Federal Student Aid, (FAFSA). The FAFSA school code for the School of Health Professions is 015252. You can apply online for federal financial aid at <http://fafsa.ed.gov/>. Contact the Program Director with questions.

No other programs within the School of Health Professions are eligible for federal financial aid at this time.

Veterans Benefits

The Paramedic, Computed Tomography, Magnetic Resonance Imaging, and the Radiologic Technology Program (Beachwood) participate in the Department of Veteran Affairs GI Bill®.

Any covered individual will be able to attend or participate in the course of education during the period beginning on the date on which the individual provides to the educational institution a certificate of eligibility for entitlement to educational assistance under chapter 31 or 33 (a "certificate of eligibility" can also include a "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website – eBenefits, or a VAF 28-1905 form for chapter 31 authorization purposes) and ending on the earlier of the following dates:

- The date on which payment from VA is made to the institution.

- 90 days after the date the institution certified tuition and fees following the receipt of the certificate of eligibility.

The School of Health Professions will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet their financial obligations to the institution due to the delayed disbursement funding from VA under chapter 31 or 33.

STUDENT HEALTH REQUIREMENTS AND RESOURCES

Cleveland Clinic Health and Wellness Resources

The health and wellness of students are key factors in ensuring a successful pathway to becoming future healthcare professionals while at Cleveland Clinic. As such, student may access many of the same services available to employees.

Caring for Caregivers

The Caring for Caregivers program offers assistance and support for students in need of connecting with someone regarding mental health and personal safety concerns. Students enrolled in Cleveland Clinic internal health professions programs are eligible for 6 Employee Assistant Program (EAP) sessions.

Services available through Caring for Caregivers include (but are not limited to):

- Suicide Prevention or Self-harm
- Sexual Assault – Partner Violence
- Substance Abuse
- Anxiety Counselling
- Stress Relief Services

To learn more about these resources and discounted costs for students, contact the Caring for Caregivers office at 216-445-6970 or 1-800-989-8820 or visit portals.ccf.org/caregivers.

Cleveland Clinic AtWork

Students may access health and wellness services through Cleveland Clinic AtWork (CCAW). Those who need to complete the required student onboarding tasks such as health screenings, immunizations, and substance abuse screenings can access services at a discounted rate.

Health and wellness resources available to students include, but are not limited to:

- Health screening examination
- Antibody titers
- Immunizations
- Substance abuse screening
- Fit testing
- STI screening

Cleveland Clinic AtWork services can be accessed at the following locations:

Medina - CCAW
970 E. Washington St., Suite 203

Medina, OH 44256
330-721-4955

Garfield Heights - CCAW
5595 Transportation Blvd., Suite 220
Garfield Heights, OH 44125
216-587-5431

Health and Immunization Requirements

Annual Influenza Immunization

All students are required to receive an influenza vaccination during the flu season (November through March). Students are responsible for the cost of this vaccination. Any student who does not comply with this requirement will not be allowed to participate in an educational experience at Cleveland Clinic. Students will be asked to show proof of vaccination during the onboarding process.

Other Immunizations and Requirements

In addition to receiving an annual influenza vaccination, students should be aware of requirements for other tests and immunizations including a negative TB test and immunization for varicella, MMR, hepatitis B, and T-dap.

Each health professions program may establish additional immunization requirements. As with the influenza vaccination, students may request a medical or religious exemption to these requirements by contacting the Director of Student/Learner Health.

Immunization/Test	Requirement
Negative tuberculosis (TB) test	Negative test result Two-step Mantoux test (TB test), QuantiFERON®-TB Gold test, or T-Spot test within twelve (12) months before the program start date, with annual updates while in the program.
Subsequent annual tuberculosis (TB) test	Negative test result One-step Mantoux test (TB test), QuantiFERON®-(TB Gold test or T-Spot)
Immunization for chicken pox (varicella) OR positive titer	Dated immunization record OR Dated positive titer results (if had chicken pox previously)
Immunization for measles, mumps, and rubella (MMR)	Dated immunization record OR Dated positive titer results
Hepatitis B titer OR waiver	No Vaccination = Waiver No Titer = Waiver Partial Vaccination = Waiver Vaccination + Negative Titer = Waiver Vaccination + Positive Titer = Titer Results
Tdap (tetanus, diphtheria, pertussis) booster within the past 10 years	CDC-approved boosters: Adacel and Boostrix

Influenza vaccination (November-March) annually	Dated immunization record
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Exemptions

Students enrolled in a SOHP program may receive a medical exemption to immunization requirements when receiving the vaccine is contraindicated.

Medical exemption requests must be made by the student to the Office of the Registrar at SOHPRegistrar@ccf.org or 216.444.5678.

Students requesting a religious exemption may request an exemption form from the Registrar's office. The student will be notified in writing of the decision regarding their request. If an exemption to obtaining the influenza vaccine is granted, the student must resubmit a request for exemption each year.

Reference: [Student Immunization Policy](#)

Student Injuries and Exposures

The emergency department will provide emergency care in the event of a program-related incident. This excludes any and all dependents. The student is responsible for all health care costs not covered by their health insurance, e.g. copays, deductibles, etc.). Students are required to report the on-the- job injury to the Director within 48 hours of its occurrence.

If a student incurs an accidental injury while at the clinical site other than a needle stick or blood/body fluid splash, they may visit the emergency department, be sent home, or report to their own private physician for care. The student is responsible for any cost incurred for treatment.

Any work-related injury is not covered by the Cleveland Clinic and the student should follow the procedure outlined below. An incident report is required to initiate a visit to the Center for Corporate Health. The student will supply the program a copy of their incident report detailing their injury.

A student must notify the academic program officials of the bloodborne pathogen exposure and comply with their policies and procedures. Occupational Health and Infectious Disease work in collaboration to identify potential or known bloodborne pathogen exposures and will participate in the following process where applicable. Students experiencing a work-related needle stick or blood/body fluid splash should report to the 24/7 Bloodborne Pathogen Exposure (BBPE) Hotline at (216) 445-0742. No Safety Event Reporting (SERS) report is required.

For questions regarding student health services and required health screenings and immunizations, contact the Director of Student/Learning Health:

Tony Tizzano, MD
 Director of Student/Learner Health
 Assistant Clinical Professor of Surgery | CCLCM - CWRU Mobile: 330-464-2111
 tizzana@ccf.org

ACADEMIC POLICIES AND PROCEDURES

Academic Honesty and Integrity

Academic integrity requires that each student acknowledge that the work performed in all educational programs and activities is their own and not the result of an unfair advantage procured by the student. SOHP prohibits all forms of academic dishonesty in its educational programs and activities. Students found in violation of SOHP's academic honesty and integrity policies will face disciplinary action up to and including dismissal from the program.

SOHP defines academic dishonesty as any fraudulent action or conduct designed to affect the evaluation of a student's academic performance or record of academic progress. It includes, but is not limited to:

Cheating

Cheating occurs when a person misrepresents their mastery of course content or clinical experience by using or attempting to use unauthorized material, information, notes, study aids, devices or communication during an academic activity. Examples of cheating include:

- Possessing, referring to, or using in any way unauthorized textbooks, notes, study aids, websites, devices, electronic transmissions, or other information when completing an academic assessment;
- Submitting someone else's work as a person's own, including, but not limited to, material obtained in whole or in part from commercial study or homework help websites, or content generated or altered by artificial intelligence (AI) or digital paraphrasing tools;
- Unauthorized giving to another person answers, information or materials when completing an academic assessment, unauthorized receiving of such answers, information or materials from another person, or unauthorized collaboration with another person on such answers, information or materials;
- Taking an examination or completing an assignment for another person or asking or allowing someone else to take an examination or complete an assignment for the student; and
- Submitting a substantial portion of one's own work from a previous course or assignment without permission from the instructor.

Plagiarism

Submitting the work done by another with the intent that it be viewed and evaluated as one's own work. Examples of plagiarism include:

- Copying another person's actual words or images without the use of quotation marks and attribution;
- Paraphrasing or restating another person's ideas or theories without acknowledging the source;
- Using facts, statistics, or other material taken from a source without acknowledging the source; and

- Failing to acknowledge collaborators.

Fabrication or Falsification

Deliberately inventing, falsifying or manipulating information, data or findings with the intent to deceive. Examples of fabrication or falsification include:

- Citing a source that does not exist, does not include the information cited, or was not used in the work;
- Intentionally presenting false or invented data, or misrepresenting how data was obtained;
- Falsifying or omitting information, including forging signatures, on applications or official academic records, such as a grade report, evaluation, or record of attendance or clinical hours; and
- Misrepresenting one's contribution to academic work.

Obtaining Unfair Advantage

Any action taken by a student or trainee that gives, or attempts to give, that person an unfair advantage over another. Examples of obtaining unfair advantage include:

- Stealing, reproducing, circulating or otherwise gaining advance access to examination materials or unauthorized access to curriculum materials;
- Depriving others of access to library or other academic materials by stealing, destroying, defacing, or concealing them;
- Intentionally obstructing or interfering with another person's work;
- Unauthorized copying, photographing, retaining, possessing, using, distributing or publishing previous or current assignments or assessment materials; and
- Misrepresentation of an excuse to avoid academic work or gain another advantage, such as false

Reference: [Academic Integrity Policy](#)

Enrollment Agreement

Students are required to sign an enrollment agreement with SOHP upon matriculation. A read-only copy of the enrollment agreement is provided to students prior to orientation for review. This document serves as a "contract" between the student and the school and outlines important details such as:

- Clock hours required to complete the program
- Program/course start date
- Tuition and fees assessed for the program
- Credential awarded for the program

- Complaint or grievance procedure
- The school's withdrawal and tuition refund policy

The enrollment agreements also requires students to attest to the following:

- Receipt of the Cleveland Clinic School of Health Professions student catalog
- Receipt of an electronic copy of the signed enrollment agreement
- Understanding the terms in which the enrollment agreement may be terminated
- Understanding that enrollment into the School of Health Professions does not guarantee employment
- Understanding the potential of additional fees for the non-return of books or equipment belonging to the school

Grading Scale

The School of Health Professions recognizes the grading scale described below. Students should review their program's grading scale and procedures, as some programs may deviate from the standard grading scale.

Scale	Grade	Grade	Definition
90-100%	A	4.0	Excellent
80-89%	B	3.0	Good
70-79%	C	2.0	Satisfactory
60-69%	D	1.0	Unsatisfactory
0-59%	F	0.0	Inadequate/Fail
	I		Incomplete
	W		Withdrawal
	P		Pass

Students must maintain a "C" grade or better to remain in good standing. Failure to meet the minimum academic requirement may result in dismissal from the program.

Incomplete Grade Policy

An incomplete grade, or "I", is a temporary grade that can be given to students who are unable to finish all course requirements due to extenuating circumstances. Students must have completed more than half of the course work at the time of awarding the incomplete grade. It must be mathematically possible for the student to achieve a passing grade by completing the remainder of the course work. It is the student's responsibility to request an incomplete grade from the instructor before the end of the term. The student must have a mitigating circumstance for not completing the course work when required, such as illness, military service, etc.

The student and instructor must sign a written agreement that includes the work to be completed, the deadline for completion, and the default grade if the work is not completed. The course instructor and/or the Program Director have discretion in determining both whether to grant the incomplete grade and determining the terms of the agreement. The maximum allowable timeframe to resolve an incomplete grade is 30 days following the end of the course for which the incomplete grade is issued.

The Incomplete Grade agreement between the student and instructor should be submitted to the office of the Registrar at the time of the "I" grade submission. If the student fails to meet the terms of the agreement by the deadline established, the Registrar will convert the "I" grade to "F". The instructor can submit a grade change at any time prior to or on the deadline once the student has met the terms of the agreement. The student will be notified of any grade changes made to their record.

Grade Appeal Policy

Policy

Students at any School of Health Professions program who received a final grade that they dispute on the grounds of either: (1) a computational error, or (2) non-uniform grading practices, may submit a Grade Appeal. A student's final grade may not be raised by doing additional assignments after the course has concluded or by revising previously submitted assignments.

The responsibility for determining all grades and for judging the quality of academic performance in a course rest with the instructor assigned to the course. Only letter grades used in calculating the grade point average may be appealed. The indications of "Pass" or "Fail" may not be appealed. The burden of proof that such an unfair influence has affected a grade rest with the student who appeals the grade. Only final course grades may be formally appealed to the Program Director in which the course was taken. The student has 30 calendar days from the grade posting date (may vary according to each program) to appeal.

If a student is suspected of violating the academic integrity policy or the code of conduct, the faculty member has the discretion to assign a grade of **F** for the course. The grade of **F** will stand as a final grade, notwithstanding a subsequent withdrawal from the program by the student. A faculty member shall notify the Registrar of the intention to assign a grade of **F** for the course, in addition to notification of the Program Director.

Procedure

- a) A student who believes that an assigned grade is incorrect should first discuss the grade with the instructor who assigned it. This contact normally is informal, and the instructor may take what action is deemed advisable in attempting to resolve the issue.
- b) If the student still is not satisfied following the informal dispute over the final course grade, then a formal grade appeal may be made to the Program Director. This appeal must be filed within 30 calendar days after the Registrar's posting of the final course grade. The appeal must include supporting information.
- c) The Program Director will request written information about the case from the instructor involved to consider and include with final determination of the grade appeal.
- d) The Program Director (or designee) will make the final decision on the grade appeal and send it in writing to the student, the instructor, and the Registrar within 10 business days of the student's grade appeal submission. The Program Director's ruling is final and cannot be appealed.

Grievance Procedure

The School of Health Professions defines a grievance as a claim by a student that Cleveland Clinic and/or one or more of its employees has violated a specific Cleveland Clinic policy or procedure.

A student may resolve a grievance through an informal grievance resolution process or a formal grievance review. Incidents addressed under other policies or processes, such as the Grade Appeal Process, or the Non-Discrimination, Harassment or Retaliation Policy, may not be grieved.

Informal Grievance Resolution

If a student feels comfortable doing so, they are advised to discuss their grievance informally with the person who is the subject of the grievance. If the parties resolve the grievance, it is deemed closed. If the grievance is not resolved at this level, the student may request an informal review by their Program Director. It is expected that most grievances will be discussed and resolved in a timely fashion informally between the student and the Program Director. The Program Director shall keep a record of the resolution.

If the response from the Program Director is unacceptable to the student, or if the Program Director is the subject of the grievance, the student may initiate the formal grievance review.

Formal Grievance Review

A student may initiate a formal grievance review by submitting their grievance to the School of Health Professions by email (SOHP@ccf.org). The grievance should include the student's name and program, the name(s) of the Cleveland Clinic employee(s) involved, the specific policy or procedure that may have been violated, and a brief description of the facts giving rise to the grievance. A formal grievance review must be initiated within fifteen (15) business days of the date on which the action giving rise to the grievance is known, whether or not an informal grievance resolution was attempted. This deadline and those set forth below may be extended by the Dean of the School of Health Professions when the Dean determines there is good reason to do so.

Step 1:

Upon receipt of a grievance, the School of Health Professions shall notify the Program Director, unless the Program Director is a source of the grievance. If the Program Director is a source of the grievance, the School of Health Professions shall notify the Dean of the School of Health Professions who shall designate an individual to fulfill the Program Director's role in Step 1 of the formal grievance review.

The Program Director shall contact the student who submitted the grievance within 5 business days of receipt of the grievance, and schedule a meeting with the student as soon as possible, but no later than 10 business days of receipt.

After meeting with the student, the Program Director shall meet with the employee(s) who is/are the subject of the grievance and may gather additional information if necessary.

The Program Director shall render a decision with respect to the grievance as soon as possible, but no later than 10 business days after meeting with the student. The decision shall include any findings, a determination whether the relevant policy or procedure has been violated, and, if so, any consequences for the violation. The Program Director shall

provide the decision in writing to the student, the employee(s) involved and the School of Health Professions.

If the student does not agree with the Program Director's resolution, they may appeal the decision to the Health Professions' Education Council's Student Appeals Committee (the "SAC") by contacting the School of Health Professions within 3 working days of receipt of the Program Director's decision.

Step 2:

Upon receipt of an appeal to Step 2, the School of Health Professions shall forward the appeal, the grievance, the Program Director's decision and any additional information gathered by the Program Director to the SAC. The SAC chairperson and two committee members will review the record of the grievance and reach a final decision. The SAC may uphold the Program Director's decision, alter the decision or require the Program Director to conduct additional investigation. The SAC shall render its decision within ten (10) business days of receipt of the appeal. The SAC's decision is final.

The **Office of Educational Equity** and **Legal Departments** are available, in a consultative capacity, to the Program Director, SAC and Medical Director of the Center for Health Professions Education or to the Chair of the Education Institute as it relates to the student's grievance.

Complaints to Accrediting and State Approving Agencies

Students have the right to file a complaint with their program's accreditor. Please refer to the Accreditation section in the general portion or the Accreditation section of the program-specific section of this catalog to obtain contact information for the agency.

In addition to the program's accrediting agency, students who are enrolled in a program approved by the Ohio State Board of Career Colleges and Schools (OSBCCS) may file a complaint with the State Board. Please refer to the Accreditation section in the general portion or the Accreditation section of the program-specific section of this catalog to obtain contact information for the OSBCCS.

Satisfactory Academic Progress (SAP) - Qualitative and Quantitative Elements

All SOHP matriculating students are required to maintain Satisfactory Academic Progress (SAP). SAP is a measure that consists of both qualitative (e.g., grades) and quantitative (e.g., number of clock hours completed) measurements. Both measurements are evaluated on an academic term basis for each program. Details about the timing and frequency of SAP review for each program are contained in the program-specific sections of the school catalog. Variances of the SOHP SAP requirements are also stated within each program section of the school catalog. To maintain Satisfactory Academic Progress, a student must always meet the minimum standards established by each program for both qualitative and quantitative measures.

The Satisfactory Academic Progress policy applies to all SOHP students. These standards are consistently applied by each program to its students, regardless of financial aid status or delivery of the program. To graduate, a student must successfully complete all courses in the program with the designated minimum score for passing (which varies from program to program, but 70% as a minimum).

Qualitative Elements of SAP

General Information

Qualitative measurement consists of a student's grades, whether expressed numerically or with letter grades (see Grading Scale below). Some programs may calculate these grades into a cumulative Grade Point Average (GPA). Some courses may be graded according to the pass/no pass system. Some programs use competency-based assessment as a qualitative measure in addition to a grading scale. In these cases, student performance of competency-related tasks is assessed to determine whether a student has obtained competency (pass) or not (fail). Each program-specific section of the school catalog provides additional details regarding each program's qualitative measurement.

Grading Scale & *Definitions

Scale	Grade	Definition	GPA
90-100%	A	Excellent	4.0
80-89%	B	Good	3.0
70-79%	C	Satisfactory	2.0
60-69%	D	Unsatisfactory	1.0
0-59%**	F	**Inadequate	0.0
	P	Pass – Any course with a “P” grade is not calculated into the grade point average.	
	NP	No Pass – Any course with an “NP” grade is not calculated into the grade point average. However, the course must be passed to graduate.	
	I	Incomplete – May be used at the discretion of the instructor in those cases in which the student is not able to complete work in the normal time. Refer to the Incomplete Grade Policy. Any course with an “I” grade is not calculated into the grade point average. Once a grade is assigned to the course (when conditions are met that allow for the removal of the “I” and assignment of a final grade), that grade will factor into the student's GPA. SAP cannot be evaluated until the I grade is updated. This can potentially cause a delay in awarding of federal financial aid.	
	W±	Withdrawal – Utilized when a student leaves the course due to an approved leave-of-absence or withdraws from the school prior to the scheduled completion of a course. Any course with a “W” grade is not calculated into the grade point average. Withdrawals may affect the quantitative elements of SAP.	

*Individual program sections of this catalog contain information on program-specific grading systems.

**Programs may, at their discretion, establish a grade threshold higher than the institutional minimum, but with a failing grade threshold of 69% and lower. All programs must apply and enforce their failing grade thresholds uniformly among students enrolled in the program.

± Non-punitive grades for courses awarded by the school include “W”. Non-punitive grades are not included in the computation of a student’s overall Cumulative Grade or Point Average. The clock hours associated with any courses for which non-punitive grades are assigned are included as hours attempted when calculating the student’s Maximum Time Frame and clock hour completion percentage.

Students are not allowed to repeat courses in which a grade has been assigned.

Minimum Average

All students must maintain a minimum qualitative average (expressed as percentage points, grades, GPA and/or competencies passed) as defined by each program to maintain Satisfactory Academic Progress. Students must achieve the minimum qualitative average at each review of SAP to maintain Satisfactory Academic Progress. Minimum passing average is 70%, while some programs may require a minimum of 75% based on their grading scale. Review the program specific section of the school catalog for more information.

Student Grievance Concerning Grades

Students should seek redress of a problem with a grade as soon as possible after the release of final term grades. Students should confer directly with the course instructor about grade concerns. Every effort should be made to resolve the problem fairly and promptly at this level. The student should refer to the Grade Appeal Policy for more information.

Quantitative Elements of SAP

For all programs, the quantitative measurement of SAP consists of a student’s satisfactory completion of program hours, based on a rate-of-progress calculation. The rate of progress calculation is the percentage of total hours completed of those hours the student has attempted. This measurement ensures that all students progress at a rate sufficient to allow them to complete their programs within the maximum time allowed. Each program establishes a number of hours to be attempted, and a number required to be completed in order for the student to maintain Satisfactory Academic Progress. More information is available in each program’s section in the school catalog.

Students’ progress against quantitative SAP requirements is measured at the end of each program’s term. Defined terms of each program are outlined in the program specific portion of the school catalog. SAP evaluation dates for each program will be outlined in the academic calendars.

Transfer and Readmitted Students/Students Changing Programs

If a student transfers to SOHP from another postsecondary institution, the transfer credits that were accepted by SOHP will count as credits attempted and credits completed for purposes of calculating the student’s quantitative progress. The corresponding grades will not count toward the student’s qualitative progress.

If a student is re-admitted into SOHP, changes program of study, or seeks to earn an additional credential, the credits that are applicable to the student’s current program of study will be included in determining the student’s satisfactory academic progress standing and the appropriate evaluation level for the student in terms of establishing the total number of credits attempted and completed at each of the student’s evaluation periods.

Maximum Time to Complete Program

All students are expected to complete their program of study within an acceptable period of time, as defined by each program, but in no case to exceed 150% of normal program length. Students failing to

complete their program of study within the maximum time will be dismissed from the program. These students are not eligible for reinstatement.

Time spent in any of the following situations/activities counts toward the maximum time to complete SOHP programs:

1. Courses for which a grade of incomplete or failure was recorded
2. Courses from which the student withdrew
3. Time in a SOHP-approved leave-of-absence.

Maximum Timeframe by program (in clock hours):

Program	Total Clock Hours	Maximum Timeframe
Cardiac Ultrasound	1751	2626.5
Cardiovascular Perfusion	2894	4341
Computed Tomography	420	630
Cytology	2192	3288
Diagnostic Medical Sonography (Beachwood)	2306	3459
Diagnostic Medical Sonography (Mercy)	1920	2880
Medical Dosimetry	1664	2496
Medical Laboratory Science	1427	2140.5
Dietetic Internship	1344	2016
Paramedic	962	960.5
Phlebotomy	240	360
Post-Primary Magnetic Resonance Imaging	420	630
Primary Magnetic Resonance Imaging	1776	2664
Radiologic Technology (Beachwood)	2328	3492
Radiologic Technology (Mercy)	2344	3516

Progress Evaluations

Each student's progress in completing the program is evaluated at the end of each term. During these evaluations, the student's Cumulative Grade (or Point) Average and rate of progress in completing program hours are calculated. Students will receive an email notification that SAP has been evaluated. The student can check their student portal to view their SAP status of Satisfactory, Warning, Probation, or Dismissal.

Students are notified in writing should they fail to meet the minimum standards of Satisfactory Academic Progress during an evaluation term. Students who fail to maintain SAP in an evaluation period are placed on SAP Warning, unless there are two or fewer terms left in the program following the term for which the evaluation is provided, in which case the student will be placed on Academic Probation. More information on Academic Probation is contained in the Academic Probation section of the school catalog.

Students taking a unit of Clinical Pastoral Education Internship are exempt from SAP evaluations.

SAP Warning

Each program establishes the term for its SAP warning period, but an SAP Warning Period cannot last more than one term. Federal financial aid funds may be disbursed during SAP Warning periods. When

placed on SAP Warning, students are provided notification in writing that outlines the reasons why the student has been placed on SAP Warning and the requirements the student must meet in order to be removed from SAP Warning (an “Academic Plan”). The Academic Plan is designed to bring the student into compliance with Satisfactory Academic Progress standards within a single term. The student’s Academic Plan and progress toward its completion will be reviewed with the student during the period of SAP Warning according to the details of the Plan.

At the end of the Warning period, if the minimum standards of Satisfactory Academic Progress are not met a student will be placed on Academic Probation. Students who satisfy the conditions of Satisfactory Academic Progress at the end of the Warning period will be returned to Satisfactory Academic Progress status.

School personnel, including the program instructors and/or the Program Director and/or Manager are available to discuss any concerns students may have.

Academic Probation

Students failing to maintain Satisfactory Academic Progress immediately following a term of warning, will be placed on academic probation. When placed on academic probation, students are provided written notification that outlines the reasons why the student has been placed on probation and the requirements the student must meet in order to be removed from probation (an “Academic Plan”). The Academic Plan is designed to bring the student into compliance with Satisfactory Academic Progress standards within a designated period of time as defined by the Program Director in the Academic Plan. The student’s Academic Plan and progress toward its completion will be reviewed with the student during the period of Probation according to the details of the Plan. A student is ineligible to receive federal financial aid during a period of academic probation.

Students are not allowed to have more than one period of probation while enrolled in their program. Students on probation who do not successfully complete the terms of their Academic Plan will be provided the opportunity to withdraw. If the student refuses to withdraw, they will be dismissed from the program. Students on probation who successfully complete the terms of their Academic Plan will return to Satisfactory Academic Progress standing, and academic probation status will be removed.

Academic Probation Appeal

Students who have been placed on academic probation may appeal the probation decision. To do so, the student must submit an appeal request to the SOHP Program Director in writing (email is acceptable) within five (5) working days of being placed on probation.

The appeal request must include:

- Information about the circumstances or events that prevented the student from maintaining Satisfactory Academic Progress, and
- What has changed in the student’s situation to allow the student to be successful in the future.

The student may submit documentation along with the appeal request. The SOHP Program Director will review the appeal and any documentation submitted by the student. The Director will also speak with involved faculty. The student will be notified of the outcome of the appeal in writing within five (5) business days of the appeal submission. The decision of the Program Director is final.

If the appeal is not successful, probation status will continue until 1) the student meets the requirements of the Academic Plan and returns to Satisfactory Academic Progress status, or 2) the student fails to

meet the requirements of the Academic Plan and subsequently withdraws or is dismissed from the program. If the appeal is successful, the student will not be placed back into a status of warning, but the program may impose requirements the student must complete in order to return to Satisfactory Academic Progress.

SAP Dismissal Policy

Students who have been placed on probation and do not return to Satisfactory Academic Progress status within the time required by their Academic Plan will be given the opportunity to withdraw or be dismissed from the program. Students may also be dismissed from the program after a period of temporary suspension. Students dismissed from SOHP programs are required to immediately return to SOHP their student IDs and any books, equipment or other materials issued to them by SOHP as outlined in their enrollment agreement.

SOHP programs pursue dismissal only after a student has been given a reasonable period of warning and/or probation to address deficiencies. Dismissal may also be recommended at any time for a student who demonstrates either a singular egregious behavior or is involved in one or more serious incidents inconsistent with the expectations for students of SOHP, or in violation of SOHP policy.

A decision to pursue dismissal requires participation of the program director and relevant program faculty and administrators. The Program Director will meet with the student to hear the student's explanation, including any mitigating circumstances in the situation. The Program Director will then meet with relevant program faculty and administrators to consider factors in the situation and render a determination. The dismissal decision is described in a notice to the student written by the Program Director. This communication is presented to the student, in person whenever possible, by the Program Director, although an in-person meeting may not be possible in all cases.

SAP Dismissal Appeal

A student who is dismissed from a SOHP program has the right to appeal. Each appeal is decided on an individual basis. The process for appealing a dismissal decision is as follows:

- The student must submit a written appeal to the Program Director. The appeal must be submitted at least one month prior to the start of the term in which the student wishes to be granted entrance into the program.
- Appeals must include a detailed explanation of the circumstances related to the dismissal. As relevant, such appeals should include official supporting documentation (i.e. medical records, court documents, or any other documentation which would support an appeal).
- The appeal will be reviewed by the Program Director and approved or denied based on the student's individual circumstances, past academic record, and potential to successfully complete the program.
- The Program Director will provide a written decision to the student within fourteen (14) business days. The decision on the dismissal appeal is final.
- If the student is allowed to re-enroll, the Program Director may place conditions that the student must meet in order to be reinstated. The Program Director may also reinstate the student on a probationary basis. Reinstatement is based on class and space availability.
- If students who are reinstated are required to repeat coursework, that coursework must be satisfactorily completed in order to continue in the program.
- Reinstated students must maintain SOHP student accounts in good standing and may not default on any payment arrangements.

SOHP reserves the right to terminate a student's enrollment if, during the student's program of study, SOHP determines that the student has failed to maintain the minimum standards of satisfactory academic progress, or has reached the maximum timeframe (150% of the program credits/hours) without successfully completing the program; failed to comply with the SOHP rules and regulations as published in SOHP's Catalog; or has failed to meet their financial obligations, which are established in the enrollment agreement. Any refund due to the student or other agencies will be calculated and refunded according to SOHP's tuition refund policy and the US Department of Education's Return to Title IV policy if applicable. A student who has been dismissed for failure to maintain SAP may reapply for admission; however, until SAP status is re-established, the student will not be eligible for any form of federal financial aid. A student applying for re-admission must first satisfy all current requirements for admission. In addition, if a student's enrollment was terminated for failure to maintain SAP, the applicant's academic records will be evaluated to determine if it is possible for a satisfactory cumulative grade point average to be achieved and if the program can be completed within the maximum time frame.

Temporary SAP Suspension

SOHP reserves the right to temporarily suspend a student for conduct disrupting or otherwise negatively affecting the learning environment, pending consideration of the student's situation by the Program Director and other relevant program faculty and administrators. The Program Director will notify the student in writing of the conditions of the temporary suspension. If the student is reinstated, the student will work with the Program Director to address any course work missed during the suspension.

Surveys

Surveys provide students with the opportunity to give feedback on educational experiences while enrolled in and after completing a program. Surveys help SOHP gauge students' satisfaction with course content, instructors and preceptors, resources, learning facilities, and the program overall.

Sexual Misconduct in Education

The Cleveland Clinic School of Health Professions is committed to the safety and inclusion of all students. In accordance with Title IX of the Education Amendments of 1972, as amended, the Violence Against Women Reauthorization Act of 2013 (VAWA) and other applicable statutes and regulations, Cleveland Clinic prohibits all forms of discrimination on the basis of sex, gender, sexual orientation, gender expression and gender identity in its educational programs and activities. More information is available on the Office of Educational Equity website: <https://my.clevelandclinic.org/about/community/education-equity>.

Cleveland Clinic has a designated Title IX Coordinator with the responsibility to oversee Cleveland Clinic's response to reports of sex discrimination, sexual harassment, sexual violence and retaliation and to identify and address any related patterns or systemic problems. All participants in, or applicants to, the School of Health Professions educational programs and activities who believe that they have been subjected to sex discrimination, sexual harassment, sexual violence, or retaliation are strongly encouraged to make a report.

Cleveland Clinic's Title IX Coordinator is:

Rachel King
Director, Educational Equity / Title IX Coordinator
TitleIX@ccf.org
216-3317-6494

Reference: [Sexual Misconduct in Education \(Title IX\) Policy](#)

Student Records

A student record will be retained in a secure location with the following confidential information while the student is enrolled in the program:

- Program Application
- Transcripts
- Acceptance / Rejection Letters
- Placement Test Records / Scores
- Enrollment Agreement
- Health requirement documentation (Core Requirements: negative two-step Mantoux TB test or QuantiFERON-TB Gold test or T-Spot test, MMR immunity, Varicella immunity, Tdap (booster within the last 10 years), Hepatitis B positive titer or waiver, flu vaccine (October through March))
- Negative or Approved Background check confirmation
- Letters of Recommendation
- Proof of Health Insurance
- Emergency Contact Information
- Course/program grades
- Competency evaluations
- Summative evaluations
- Candidate interview forms
- Requests for letters of recommendations
- Requests for unofficial and official transcripts

Once the student has graduated from the program, a graduate's permanent student record will be confidentially maintained that will include:

- Dates enrolled in the program
- Course/program grades
- Transcript
- Diploma
- Student requests for letters of recommendations
- Student requests for unofficial and official transcripts.

All other documents, unless otherwise required by accrediting agencies or federal mandate, will be removed from the students' record and securely destroyed after 1 year of the students' graduation date.

Transcript Requests and Education Verification

Official transcript requests can be emailed to the office of the Registrar at SOHPRegistrar@ccf.org. Transcript requests should include where transcripts should be sent along with a signed FERPA release form.

Students can download unofficial transcripts through the student portal.

STUDENT SERVICES

The School of Health Professions offers a wide range of services and resources to enrolled students. Some offerings may be location-specific, while others are accessible to all students regardless of where their program of study is located.

Advising

Advising is an essential student support service provided to all students by Program Directors, faculty, and School of Health Professions (SOHP) administrative caregivers.

Program Directors provide academic advising regularly to students. Students can find office hours on the course syllabi and may contact Program Directors and instructors to schedule meetings to discuss their academic progress as needed. It is required that students see their Program Director if the status of their Satisfactory Academic Progress (SAP) evaluation is Warning, Probation, or Dismissal.

Tuition Payment advising is available through SOHP. Students may direct questions regarding transactions on their student account statements to their Program Director or the SOHP Registrar.

Students with questions surrounding health or immunization-related topics may contact the Director of Student and Learner Health to learn about resources and requirements.

Banking Services

Akron General Hospital

An ATM is located in the Main Lobby across from the hospital gift store.

Lutheran Hospital

An ATM is located in the cafeteria on the Ground Floor.

Main Campus

ATMs are available 24-hours a day across Cleveland Clinic's main campus in the following areas:

- First floor of the J Building - Sydell & Arnold Miller Family Pavilion (near the skyway elevators)
- First floor corridor between M Building - Cleveland Clinic Children's and H Building
- Lobby of the A Building - Crile Building
- Skyway between the A Building - Crile Building and main hospital buildings.
- Lobby of the C Building - W.O. Walker Center
- Lobby of the E Building - Emergency
- Lobby of the Intercontinental Hotel
- Lobby of the Intercontinental Suites

Students may access three KeyBank locations available at Main Campus:

J Building - Sydell & Arnold Miller Family Pavilion

Hours: Monday - Thursday, 9 a.m. - 4:30 p.m.

Friday, 9 a.m. - 6 p.m.

Saturday - Sunday, Closed

Phone: 216.229.2189

2010 E 90th St., Cleveland, OH 44106

Hours: 24-hour ATM

2049 E 100th St., Cleveland, OH 44106

Hours: 24-hour ATM

Career Assistance and Planning

Program Directors will provide career counseling to students and facilitate access to Cleveland Clinic recruiters. The Program Manager for graduate services (title may need revision) can provide additional assistance with resume preparation. SOHP hosts quarterly resume and interview workshops available through Center for Health Professions Education.

Computer Labs

In addition to the computer labs and laptops accessible to them, students may utilize free Wi-Fi access at all Main Campus and separate educational center locations.

Main Campus

Students whose program takes place at Main Campus have access to free Wi-Fi while on site. Students may work independently in a variety of spaces across campus, with access to tables and soft seating. Access to dedicated program-specific computer labs, laptops and study spaces will vary by program. Students should inquire with the Program Director to learn about technology resources offered.

Akron General

Students have access to 24 laptops available in the classroom where the students have lecture. Students may access laptops as needed and can independently work on the devices Monday-Friday from 12:30 PM - 5:30 PM if needed.

CCAC

Students enrolled in programs at CCAC have access to three classrooms with 18 student workstations in each room. Additionally, the DMS scanning lab has 10 laptops available for student access.

Lutheran Hospital

Students may use 12 computers available in the lecture classroom to work independently.

Mercy Hospital

Students have 24/7 access (with identification badge) to 7 computers in the Medical Library at Mercy Hospital.

The Radiologic Technology Program (Mercy) has a computer lab with 10 workstations available to its students.

University of Akron Wayne College

Students may use computers available in two classroom spaces utilized by the program.

Dining Facilities

Students have access to on-site cafeterias, restaurants, and vending machines to purchase food items and take breaks at Main Campus and each separate education center. Offerings vary across locations.

Akron General

Students can find Au Bon Pain and Panera Bread available in the Main Lobby of Akron General. Additionally, a Fresh Inspirations Café is located on the lower level of the hospital.

Vending machines can be found in the cafeteria, on the ground floor and throughout the hospital. Please ask a caregiver for the nearest vending location.

Cleveland Clinic Administrative Campus (CCAC)

The Administrative Campus has accessible tables and chairs, soft seating, and kitchens across the 5 buildings at the location. Students are permitted to utilize these spaces while on-site.

Lutheran Hospital

Lutheran Café is located on the Ground Floor of Lutheran Hospital, students can choose from multiple grab-and-go options for busy students as well as various entrees, sandwiches, pizza and soup. Additionally, vending machines are available in the following areas:

- Inside the Cafeteria on the Ground Floor
- Emergency Department Waiting Room
- ICU Waiting Room

Main Campus

Students have access to several on-site cafeterias, restaurants, and coffee shops across Main Campus to purchase food items and take breaks. Options include grab-and-go meals, snacks, entrees, soups, salads, sandwiches, fine dining and more.

To find a dining option at Main Campus, [click here](#).

Mercy Hospital

Students can purchase dining options at the Mercy Café and Subway. Mercy Café features meals such as soup, rice bowls and flatbread pizza, as well as grab-and-go options, Mercy Café is yet another option for students looking for meal options. The on-site Subway offers made-to-go flatbreads, subs, and salad as well as a grab-and-go boxed lunches.

University of Akron Wayne College

The Zip Station is located in Wayne College's Student Life Building. Here students can purchase a variety of food options such as burgers, quesadillas, sandwiches, salads and more.

Email Accounts

SOHP students receive an official Cleveland Clinic email address. All school-wide and program-specific communications are provided through these official school email accounts. Students should check their email daily to keep informed and not miss important information.

Fitness Facilities

Students are permitted to access Cleveland Clinic fitness centers at a monthly rate of \$45, three months for \$120, or for a full year at \$360. Learners who are current employees of Cleveland Clinic may access these facilities for free. To sign up, students must complete an online application and receive confirmation of access via email.

Fitness centers are located at several Cleveland Clinic locations, including Main Campus and separate educational centers (Akron General, CCAC, Lutheran Hospital, and Mercy Hospital).

To learn more about the available fitness facilities and complete an application, [click here](#).

Library Access

Students enrolled in Cleveland Clinic's School of Health Professions programs are encouraged to take advantage of resources available through Cleveland Clinic libraries.

Main Campus

Students may access the Cleveland Clinic Floyd D. Loop Alumni Library located at Main Campus on the 4th floor of the JJ South building. There are three additional regional medical library locations at Fairview, Hillcrest, and South Pointe Hospitals. Cleveland Clinic libraries provide access to print and electronic resources, inter-library loans, literature search services, training and instruction, and live virtual reference services.

Students may sign-up for a library account to access electronic resources including books, textbooks, and journals. To register, students must have a Cleveland Clinic ID number. When registering for an account, students should choose the "Other" option under Job Position to indicate their student status and program. To sign-up for electronic access, [click here](#).

To access the Floyd D. Loop Alumni Library, [click here](#).

Akron General

To learn more about services offered and hours of operation, visit the Akron General Medical Library's webpage by [clicking here](#).

The Medical Library and Community Health Library of Cleveland Clinic Akron General is open to students. Both Libraries are located on the second floor off the Main Lobby.

Students who would like to check out books from the Medical Library must apply for a Cleveland Clinic Akron General Library card. Once a card has been issued, students may check out books from the Medical Library as well as any other OhioLINK library. Journals and Reference Books do not circulate. All materials circulate for 3 weeks and may be renewed if no hold has been placed on the item. Students

who fail to return or renew materials within the allotted time will be charged a replacement fee, and processing fee and risk losing library privileges.

Students who register with the Cleveland Clinic Akron General Medical Library have access to all OhioLINK services including research databases, interlibrary loans, and the Electronic Journal Center. The library staff is available to assist students with these services.

Mercy Hospital

To learn more about services offered and hours of operation, visit the Mercy Hospital Medical Library's webpage by [clicking here](#).

Students may sign-up for a library account to access electronic resources including books, textbooks, and journals through the Mercy Hospital Medical Library. To register, students must have a Cleveland Clinic ID number. When registering for an account, students should choose the "Other" option under Job Position to indicate their student status and program. To sign-up for electronic access, [click here](#).

Office of Educational Equity

Cleveland Clinic's Office of Educational Equity (OEE) addresses all forms of discrimination, harassment and/or retaliation based on diverse characteristics such as race, religion, gender identity, disability, marital status, age, etc. The OEE handles all reports of any potential violation with urgency and care, and it is strongly suggested that any perceived incidents of discrimination and harassment are reported in a timely manner so that the OEE can better address the issue.

Individuals who wish to report an instance of discrimination, harassment or retaliation have three avenues to do so:

- Program Leadership (of any educational program/activity in which the reporter or the alleged offender participates)
- The Office of Educational Equity (through EduEquity@ccf.org)
- Anonymous Reporting (using the [anonymous online reporting tool](#))

For more information, visit: [Office of Educational Equity](#)

Orientation

After completing onboarding and prior to beginning their program, students will attend a virtual, general new student orientation followed by a program-specific orientation on or before the first day of class. The general orientation focuses on universal information, policies, and resources available to all School of Health Professions students. Students will be notified by the Program Director of when their program-specific orientation will be held. At this session, students will meet faculty and other personnel and become familiar with educational facilities, expectations, procedures, schedules, and other aspects specific to the program.

Parking

Parking is available to students at Main Campus and all separate education centers at Akron General, CCAC, Lutheran Hospital, Mercy Hospital and University of Akron Wayne College at no cost.

Main Campus

Students whose program takes place at Main Campus will receive parking assignments at an off-site surface parking lot at no charge. Students must have a Cleveland Clinic ID badge to receive a parking assignment. Students at Main Campus may use the free shuttle service to and from their assigned lot. Students are required to park in their assigned lots during normal business hours (5:30am to 5:30pm). If students are required to be on campus for third shift, weekends and holidays, they will have automatic default access to a designated on-campus parking garage. Student may access the default garage access hours begin at 5:30pm and end at 10:30am.

University of Akron Wayne College

Parking at this location is free, with handicapped parking also available, located in the lot behind the Boyer Gymnasium. There are, however, certain rules for parking at this location:

- Parking is prohibited on the entirety of the main driveway, as well as the oval drive at the front of the building
- The designed traffic flow should not be obstructed by parking

Note: Wayne College reserves the right to ticket vehicles subject to fine and/or to have the car towed at the individual's expense.

Post Office

Main Campus

Airborne Express and blue U.S. Postal Service boxes are located outside the Cleveland Clinic Pharmacy and on the East 100th Street side of the Crile (A) Building during the following hours: Monday – Saturday 7 AM - 5 PM.

Security and Protective Services

The safety of students is a top priority of SOHP. Protective services are offered across Main Campus as well as the separate education centers, including a Safety Escort Program.

Students should report suspicious activity or acts of violence to the Cleveland Clinic Police Department by dialing (216) 444-2250 or call 911 in the case of an emergency. For other non-emergency matters, the Police Department can be reached at (216) 444-2250.

Safety Escort Program

The Safety Escort Program is a free service available provided by the Cleveland Clinic Police Department for those who need safe transportation to and from various locations at their site. Main Campus and the separate education centers at Akron General, Lutheran Hospital, and Mercy Hospital take part in this program.

Where offered, Safety Escorts are available 24 hours a day, 7 days a week, 365 days a year. Escorts are provided either by foot or police vehicle depending on the situation and call volume at the time of the request.

Students may request a Safety Escort by calling the phone number for their location:

- Main Campus: (216) 444-2250 (x42250)
- Akron General: (330) 344-7604
- Lutheran Hospital: (216) 363-2436
- Mercy Hospital: (330) 489-1250

Requesters will be asked to provide the following information to dispatchers:

- Your first and last name
- Your contact number
- Your pickup location
- Your destination

Students enrolled in programs at Cleveland Clinic Administrative Campus (CCAC) can request a security escort by stopping at one of the security desks located in Buildings 2 until 10 PM or 24-hours a day in Buildings 3 and 4 or call one of the phone numbers below.

CCAC Security Desk Phone Numbers

Security Building 2 - 216-448-5151

Security Building 3 - 216-448-0090

Security Building 4 - 216-448-5753

University of Akron Wayne College

The University of Akron Wayne College employs a full-time police officer as part of its faculty. The officer is commissioned by the State of Ohio with full law enforcement authority.

If individuals are unable to reach the Wayne College campus police officer for assistance, they are encouraged to contact the Student Services Office at (330) 684-8900 or reach out to 911. Blue emergency response devices have been added throughout parking lots as an additional emergency resource.

Student Housing

The Student Housing Program works to meet the housing needs of individuals completing a School of Health Professions program. Short-term (up to one year) and long-term (one to five years) arrangements are available.

Individuals interested in pursuing housing should visit the [Student Housing Program website](#) to learn more about student housing options and helpful resources, including:

- Factors to consider when searching for housing
- Budgeting tips
- Process of signing a lease
- Cleveland neighborhoods where housing is available
- Transportation options

Student Resources Intranet Page

The [Student Resources intranet page](#) offers many resources and services offered to students through the School of Health Professions, including:

- Library access
- Parking services
- Student health resources
- Student housing
- Scholarships
- Safety Event Reporting link (to use in the case of injury or illness)
- Student-focused newsletters and events

Students must be logged into the Cleveland Clinic VPN or using a Cleveland Clinic device to access the Student Resources intranet page.

Technical Support Services

Support is available to students experiencing issues with a course or logging in to MyLearning, as well as general tips on how to use and navigate the learning platform by visiting the [Learner Support tab](#). Here students will find helpful videos, handouts, and FAQs. Students may also contact the cTEKI Help Desk at elarning@ccf.org.

PROGRAMS

CARDIAC ULTRASOUND

<i>Program Snapshot: Cardiac Ultrasound</i>	
Program Director	Amy Dillenbeck, MS, ACS, RDCS, FASE dillena@ccf.org
Location	Main Campus J Building, Room J3-125 9500 Euclid Avenue Cleveland, OH 44195
Clock Hours	1751
Program Length	52 weeks / 12 months
Delivery Method	Residential
Total Cost (tuition + fees)	\$15,000

Overview

The Cardiac Ultrasound program is a certificate-level, full-time, 52-week program divided into three terms 16-18 weeks in length – Fall, Spring, and Summer. The program is designed for echocardiographic sonography with coursework that builds upon prior courses. It consists of clinical training, including hands-on practice, and includes an academic curriculum in echocardiographic principles, technology, physics, and instrumentation. Students successfully completing the program are eligible to sit for the national registry exam through either Cardiovascular Credentialing International (RCS) or American Registry for Diagnostic Medical Sonographers (RDCS). Graduates may work in a variety of allied healthcare settings, from large hospital centers to small outpatient clinics, performing diagnostic ultrasound examinations of the adult heart.

Mission Statement

The mission of the Cardiac Ultrasound Program is to prepare competent entry-level cardiac sonographers in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains. We will train cardiac sonographers of the highest caliber, consistent with the standards and expectations of the Cleveland Clinic.

We are committed to valuing all people throughout our organization, regardless of background or culture. A diverse and inclusive environment for students and staff and culturally appropriate care for our patients, are essential to fulfilling our vision to be the best place for care anywhere and the best place to work in healthcare. We welcome students from diverse backgrounds and cultures.

Objectives

Upon graduation the student shall be able to:

- Obtain, review, and integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results
- Perform appropriate procedures, record and analyze anatomic, pathologic, and/or physiologic data for interpretation by a physician
- Exercise discretion and judgment in the performance of sonographic and/or other diagnostic services
- Demonstrate appropriate communication skills with patients and colleagues
- Act in a professional and ethical manner

Accreditation

Institutional Accreditation

The Cardiac Ultrasound Program is approved by the Cleveland Clinic which is accredited by the Joint Commission (TJC), Centers for Medicare and Medicaid Services (CMS), and the Ohio Department of Health (ODH).

Programmatic Accreditation

The Cardiac Ultrasound Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Joint Review Committee on Education in Cardiovascular Technology.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 113th Street N., #7709
Seminole, FL, 33775-7709
(727) 210-2350

State Approval

The Cardiac Ultrasound Program is approved by the Ohio State Board of Career Colleges and Schools (School Registration No. 2165) in accordance with Ohio Revised Code Chapter 3332.

Ohio State Board of Career Colleges and Schools
30 E Broad St Suite 2481
Columbus, OH 43215
614 466-2752
Scr.ohio.gov

Faculty

Amy Dillenbeck, MS, ACS, RDCS, FASE, Program Director (full-time)

Education:	Diploma, Cardiac Sonography, Institute of Medical Ultrasound B.S., Health Science, Clemson University M.S., Exercise Science, University of South Carolina	
Phone:	216-444-1055 (Office) 216-389-8721 (Cell)	Email: dillena@ccf.org

Melinda Imbrogno, BBA, RDCS, FASE Clinical Coordinator (full-time)

Education:	A.A.S., Cardiac Ultrasound, Cuyahoga Community College B.B.A., Business/Marketing, University of Toledo	
Phone:	216-444-6214 (Office) 216-870-5555 (Cell)	Email: imbrogm@ccf.org

Facilities

The Cardiac Ultrasound Program has a classroom and scan lab that contains the appropriate equipment and training materials for students. Supplies necessary to effectively train students are readily available and stored in the classroom. Labs are furnished with industry-current equipment, such as scanning beds,

scanning chairs and ultrasound systems. To ensure equipment is in proper working order, Cleveland Clinic biomedical engineering inspects equipment once a year.

Advisory Board

The Cardiac Ultrasound Program's Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling educational objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Richard Grimm	DO, FACC, FASE	Medical Director, Cleveland Clinic
Amy Dillenbeck	MS, ACS, RDCS, FASE	Program Director, Cleveland Clinic
Melinda Imbrogno	BBA, RDCS, FASE	Program Coordinator, Cleveland Clinic
Patrick Collier	MD, PhD, FASE	Assistant Medical Director CCF Echo Lab, Cleveland Clinic
Mari Knettle	DPT, EdD, FASAHP	Dean, School of Health Professions, Cleveland Clinic
Katerina Filippou	RDCS, FASE	Coordinator of Education, Cleveland Clinic
Anne Campbell	MS, RDCS	Imaging Specialist II, Cleveland Clinic
Helga Lombardo	RDCS	Clinical Manager Echo Lab, Cleveland Clinic
Mike Oleski	RDCS, FASE	Akron General Supervisor Echo Lab
Brian Klefos	BBA	Public Member
Alexandria Nolan	BS, MS	Student Member
Jenny Handke	BS, RCS	Graduate Member
Hallie Hyatt	BS, RCS	Graduate Member
Gillian Dralle	BS, RCS	Graduate Member

Technical Standards

The following standards, demands and skills are the cornerstone of the healthcare environment. Standards are not conditions for admissions to the program, but they do indicate abilities and characteristics that are necessary to successfully complete the requirements of the Cardiac Ultrasound program Adult Echocardiogram Certificate Program.

Behavioral Standards

With or without reasonable accommodations, the student must be able to accomplish the following safely, efficiently and competently:

- Demonstrate appropriate responses to situations involving the critically ill, medical emergencies and death.
- Prioritize and manage multiple tasks simultaneously.
- Understand and apply clinical instruction from department personnel.

- Interact effectively with patients, families, supervisors and co-workers of the same and diverse cultures by demonstrating such qualities as respect, politeness, collaboration, teamwork and discretion.

Physical, Interpersonal, Communication, Mobility, Tactical, Hearing, and Visual Demands

- Positioning and/or roll patients from side to side when necessary
- Move or transfer patients out of a wheelchair, stretcher and other devices
- Moving heavy equipment including ultrasound machines, patient gurneys and other cardiovascular equipment
- Monitoring of patient in dim light
- Accurately analyze imaging and instrumentation monitors to acquire images of patient's anatomy at appropriate level within level of training
- Differentiate among subtle shades of color and greyscale used in imaging and other cardiovascular procedures
- Explaining a cardiovascular imaging examination or cardiovascular procedure to groups of medical professionals for critique, education and conferences
- Interpretation and analysis of data from patient charts and confirm procedural requests
- Correlate data for the purpose of performing an examination or cardiovascular procedure according to protocol, professional guidelines and hospital policies and procedures
- Accurately perform cardiovascular procedures appropriate within level of training
- Manipulate mechanical and patient care equipment. i.e., keyboards, dials, switches, push buttons, plug in devices and blood pressure equipment
- Utilize devices such as laser printers and have a working knowledge of digital devices such as personal computers, tablets and intelligent phones
- Respond appropriately to equipment signals such as sound and lights
- Use hospital lab equipment which requires fine motor skills, coordination and dexterity
- Performing examinations on patients of varying body sizes
- Work in a stationary position for an extended period of time

Admissions Requirements

Admission to the Cardiac Ultrasound Program is a selective process and a limited number of applicants are accepted each year. The applicant should demonstrate a dependable, mature demeanor and interact well with other people. The student should have a genuine desire to care for the sick, and have the ability to work well under pressure.

The application process is open to applicants who meet all the following minimum criteria at the start of the program.

1. 18 years of age
2. Completion of either:
 - a. Associate's degree (healthcare field preferred)
 - b. Accredited allied health program
 - c. Bachelor's degree (any field)
3. Completion of the following prerequisite post-secondary coursework **with a grade of C or better**:
 - a. Anatomy and Physiology I with lab
 - b. College Algebra or higher
 - c. Communications (English, speech, composition course)
 - d. Physics (preferred but not required)
4. Provide a signed shadowing form (available on school website) demonstrating you have observed (shadowed) for 4 hours in echocardiography.*

5. Possess the physical and mental qualities required to work as a cardiac sonographer (see “Physical, Communication, Mobility, Tactical, Hearing, and Visual Demands”)
6. Provide proof of current immunizations and TB test (must be current prior to school start)
7. Proof of current certification for **American Heart Association** Basic Life Support (BLS)

* Shadowing must be completed at any Cleveland Clinic facility and can be coordinated with the assistance of the Program Director if needed. Once completed, a signed shadowing form is required with the candidate’s completed application and supporting documentation.

Application Process

The school begins accepting applications through the Campus Café system **March 1st** each year. Complete applications with all supporting documentation submitted by the application deadline of **June 1st**. **You may download all forms from the school website.**

Applicants must submit the following:

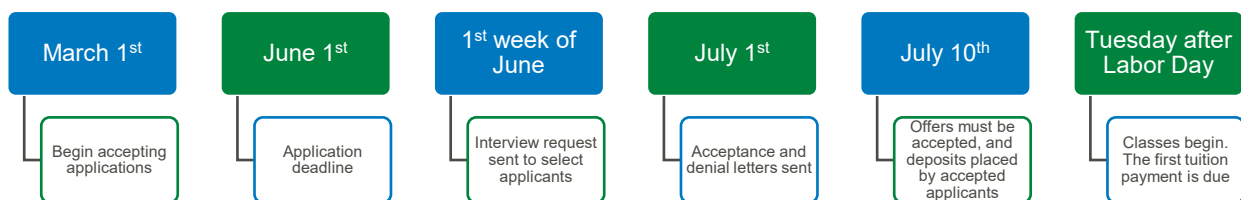
- Completed application through the Campus Café system
- Completed, signed Shadowing Form
- \$20 application fee (non-refundable)
- Resume
- Two letters of reference (one work/professional, one personal)
- Post-secondary educational transcripts (must be official)
- Application Essay (see guidelines below)
- Proof of **American Heart Association** Basic Life Support (BLS) certification

Application Essay Guidelines (500 -750 words)

Your completed application includes an essay stating:

- Why you want to pursue a career in cardiac sonography
- How your prior experiences have prepared you
- What specific qualities you possess that set you apart from other applicants
- What personal characteristics you feel would be the most helpful to a person who chooses a medical career

Application Timeline



Selective Admissions Criteria

In the event the number of applicants exceeds the number of available seats, a rubric will be used to objectively assess applicants to the program. The rubric is based on four areas:

1. Academic degrees and accomplishments,
2. Personal accomplishments and volunteerism,
3. Previous experience in the healthcare setting,
4. And overall impression of applicant from personal interview

Once ranked, students will be notified of their acceptance status. An additional 10 -15% of the applicant pool will be notified that they are alternates for admission. They will be notified if they have an offer of acceptance once accepted students place deposits.

Background Check and Drug Screening

Candidates must pass a criminal background check. If a candidate does not pass the criminal background check, they will not be allowed to continue in the program.

It is required for students in the Cardiac Ultrasound program to take one of the two national registry credentialing examinations before the end of the summer semester. These tests are offered by Cardiovascular Credentialing International (CCI) and the American Registry of Diagnostic Medical Sonographer (ARDMS). **If you have a criminal background it can be a barrier to taking the national registry examinations, which will be a barrier for you to graduate from this program.** Credentialing bodies such as CCI and ARDMS have rules indicating that they may take action against an applicant, candidate, or registrant in the case of conviction, plea of guilty or plea of nolo contendere to any crime.

Cardiovascular Credentialing International® (CCI®)

<http://www.cci-online.org/>

American Registry of Diagnostic Medical Sonographers® (ARDMS®)

<http://www.ardms.org/>

Drug tests and evaluations for chemical abuse may be required at any time, without notice. Students refusing such tests shall be considered to have tested positive for use and grounds for dismissal.

Graduation Requirements

To successfully remain in any program and be eligible for graduation the student must:

- Complete all clinical rotations with 900 hours
- Complete all course requirements
- Successful completion of the CCI or ARDMS (SPI & Adult Echo) registry exam
- Maintain passing grade of 75% including clinical competency evaluations

If a student does not receive a passing grade in the academic or clinical rotations, the student will not be able to continue in the program. At that time, the student will be dismissed from the program and will receive a letter documenting the total hours (both clinical and didactic) that they have completed for their own records.

Credentialing Exams

Students are required to sit for the CCI or ARDMS registry exam prior to graduation. Successful passing of the exam in the respective field of study is required to graduate from the program. Students that do not pass the registry exam will not graduate from the program. If a student passes the registry exam within one year after the graduation date they will graduate from the program. In addition, the school will reimburse the cost of the exam to the student when passing the registry exam.

Upon successful completion of the registry exam, the student will earn the following credential:

CCI Credentials: Registered Cardiac Sonographer (RCS)

ARDMS Credentials: Registered Diagnostic Cardiac Sonographer (RDCS – AE)

Clinical Rotation

Students are required to rotate through all clinical sites designated by the school. Students are also required to attend didactic classes throughout the year. It is the program's philosophy that students will be better prepared for the workforce by the experience they gain in varied clinical rotations approved by the school. Requests for fixed or multiple clinical site experience will be considered on a case-by-case basis, but ultimately determined by the Program Director. Students who successfully complete their clinical rotation and didactic classes will be eligible for graduation.

Students should adhere to the following standards to succeed in clinical rotations:

- Never turn down scan time.
- Anticipate the needs of the sonographers with whom you will be working (stock the room, clean the bed, remove dirty linens, etc)
- Carry a small pocket notebook/tablet for recording questions and techniques pertaining to various procedures in which you observed or participated.
- Ensure that you maintain patient confidentiality and keep the notebook in your control at all times.
- Familiarize yourself with the operation and controls layout of the different pieces of equipment with which you will work. This is best done in clinic downtime when equipment is idle or in lab time
- Ask your supervisor whenever you are in doubt about a procedure or patient care technique.
- Do additional reading at home or ask your clinical instructor for more information or resources.
- Know when and to whom to report significant patient symptoms.
- Acquaint yourself with your department and how it functions: hours, duties, supplies, resources, and interdepartmental conduct.
- Know about your institution's emergency, fire and disaster regulation and procedures.
- Observe and participate in as many procedures performed in your assigned area.
- Maintain all records as required by the Cardiac Ultrasound Program
- Learn and develop proper professional attitude and ethics needed when working in the clinical environment.
- Supply your own transportation to and from the clinical site.
- Maintain high ethical and professional standards at all times.
- Develop proficiency in all aspects of the clinical environment.

To successfully complete the clinical aspect of training, each student must complete the required knowledge, skills, and objectives listed in the Clinical Site Attendance and Records Keeping outlined in this section of the catalog.

Grading Scale

Grade reports are available to students at any time throughout the program via MyLearning. Course grades are based on attendance, written tests, laboratory work, clinical assignments and projects as indicated on each course syllabi.

Scale	Grade	GPA	Definition
93-100%	A	4.0	Excellent
84-92%	B	3.0	Good
*75-83%	C	2.0	Satisfactory
67-74%	D	1.0	Unsatisfactory
0-66%	F	0.0	Inadequate/Fail

*Minimum passing grade is 75% for all classes, which is a C. Grades are rounded up from ≥ 0.50 .

Dismissal and Readmission Policy

Students that are dismissed from the program are not eligible for readmission or reinstatement in future years.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Cardiac Ultrasound Program will occur after the completion of the first and second terms of the program. This will ensure Cardiac Ultrasound students are meeting the 75% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

Attendance affects the quality of a student's academic performance. Therefore, prompt and regular attendance in lectures and lab sessions is expected for all students. A student's absence from class or labs could affect clinical competence and possibly compromise patient safety at hospital sites. For these reasons, full attendance and punctuality is expected for all classes and clinical education.

Students are awarded a bank of 10 benefit days (80 hours) to use for personal and sick time over the course of the 12-month program. It is the responsibility of the student to inform the school of an absence, scheduled or unscheduled.

Unscheduled – Text the program director and coordinator (at least one hour prior to the scheduled class/clinical):

- If a student is ill and is unable to attend class or clinical.
- If a student is running late to class or clinical (include an estimated time of arrival)
- If a student needs to leave early from class or clinical
- Missed time will be subtracted from benefit hours

Scheduled – Submit a time off request to program director and coordinator (at least 72 hours in advance):

- If a student plans ahead and will be absent from class or clinicals and will use bank hours for all or part of the day
- Requested dates require approval from Program Director

Students may be asked to verify any absence with an excuse from a medical doctor. Failure to comply with the program's attendance policy may result in corrective action. Refer to corrective action policy for more detail.

Student Notification of Clinical Site Tardiness or Absence Policy

The student is strongly discouraged from being late to the clinical site. If the student must be late or absent for clinical education, they are obligated to contact their supervisor prior to the time of scheduled arrival. Lack of notification or chronic tardiness will result in disciplinary action.

Make-up Time Policy

Any days missed from the clinical education over and above the allotted number of benefit days must be made up within the next 30 days. Make-up time must be coordinated by the student with the clinical Site

Supervisor of their current rotation and approved by the Clinical Coordinator. The Clinical Coordinator has the authority to determine which days are acceptable as make-up days.

Students will not be allowed to make up time in other than four or eight-hour blocks of time with a hospital preceptor. Students may not participate in excess of eight hours in any 24-hour period or 40 hours in any one-week period of combined classroom and clinical assignments.

Excused Absence Policy

Make-up time or forfeit of benefit days will not be required for students who have permission to attend local, state, or national meetings, however, students must submit a certificate of attendance from the workshop or courses they attend at these meetings. Excused absences for other than an approved educational function must be made-up before course completion. Excused absence (other than benefit days) from Clinical Education will be allowed only if the student has permission from the Program Director or Clinical Coordinator.

Scheduled Break Weeks

Students have two scheduled break weeks over the length of the program as indicated by the academic calendar. Students who wish to vacation should utilize break weeks for this purpose.

Inclement Weather

The student should make every attempt to report to the clinical site in inclement weather. Students are asked to contact the Program Director or Clinical Coordinator if they are not able to make it to the school on time. Tardiness or absence due to inclement weather will not be counted against the student, if the student has called. The Program Director will notify the student if delivery of class content is adapted to online learning for the day if necessary.

Clinical Site Attendance and Records Keeping by Student

Cardiac Ultrasound program students utilize the Trajecsyst online clinical record keeping system to document clinical time, procedures and competencies. Students will receive training on how to document clinical time in the Trajecsyst system prior to beginning clinical rotations. Falsification of records will result in dismissal from the program.

Tuition and Fees

Tuition is \$15,000 plus fees and may be paid in installments. Upon acceptance to the program, a \$300 nonrefundable deposit must be submitted to secure a position. This will be applied toward initial installment due by the 1st day of school.

Tuition and Fees: \$15,000

The tuition may be paid in a lump sum or in **three installments of \$5,000** each. If paying in installments, the payments are due by the first day of each term.

1 st day of fall term	\$5,000
1 st day of winter term	\$5,000
1 st day of summer term	\$5,000

Textbook rental, Cleveland Clinic-issued laptop rental and ASE student membership are included as part of tuition payment. Students are responsible for other expenses including but not limited to navy blue uniforms. The examination fee will be reimbursed for passing either the CCI or ARDMS national credentialing examination for adult echocardiography.

Scholarships

Students will have the opportunity to apply for scholarships funded by the generosity of the Kohler Foundation. The following are Kohler Foundation scholarships in which all accepted students are eligible.

Kohler Diversity Scholarship

This scholarship is intended to provide financial assistance to students from a range of backgrounds and life experiences. Preference will be given to students who have experienced significant challenges or hardships that have influenced their life journey. These challenges and experiences may revolve around any number of factors, such as family background, community setting, educational experience, health-related challenges, and general life experiences.

One \$10,000 non-renewable scholarship is awarded before the start of school. The annual award is split evenly over fall, spring, and summer terms. The scholarship is paid directly to the school and will result in a tuition credit towards the school tuition. It is non-refundable.

Eligibility:

To be eligible for scholarship consideration, students:

1. Must be accepted into the Cardiac Ultrasound program
2. Must have a minimum cumulative 3.0 GPA at prior academic institution(s)
3. Must submit the Diversity Scholarship Application by June 1st deadline
4. Cannot be awarded in collaboration with another Cardiac Ultrasound Program scholarship.

Kohler Merit Scholarship

The purpose of the merit scholarship is to reward, recognize, and incentivize those students who have shown academic and clinical excellence. There will be three \$5,000 non-renewable scholarships awarded in each of the spring and summer semesters. The scholarship is paid directly to the school and will result in a \$5,000 tuition credit toward the current term school tuition. It is non-refundable.

Spring Term: Applications open Nov. 15th. Application deadline is December 15th.

Summer Term: Applications open March 15th. Application deadline is April 15th.

Eligibility

To be eligible for scholarship consideration, students:

1. Must be enrolled full-time in the Cardiac Ultrasound program
2. Must have a minimum cumulative GPA of 3.5 at the time of application
3. Cannot be awarded in collaboration with another Cardiac Ultrasound Program scholarship

Academic Calendar

Date	Calendar Description
September 3, 2024	Fall Term Begins
September 3, 2024	1/3 Tuition Payment Due
September 17, 2024	Constitution Day-Classes/Clinicals in Session
September 19, 2024	Last Day to Receive 75% Tuition Refund
September 30, 2024	Last Day to Receive 50% Tuition Refund
October 16, 2024	Last Day to Receive 25% Tuition Refund
October 31, 2024	Thursday Clinicals Start
November 27-29, 2024	Thanksgiving Break
December 16-20, 2024	Final Exam Week
December 23, 2024	SAP Evaluation
December 23, 2024-January 1, 2025	Semester Break- No Class or Clinical
January 2, 2025	Spring Term Begins
January 2, 2025	1/3 Tuition Payment Due
January 20, 2025	Last Day to Receive 75% Tuition Refund
February 1, 2025	Last Day to Receive 50% Tuition Refund
February 19, 2025	Last Day to Receive 25% Tuition Refund
March 24-28, 2025	Spring Break- No Class or Clinical
April 28- May 2, 2025	Final Exam Week
May 5, 2025	SAP Evaluation
May 5, 2025	Summer Term Begins
May 5, 2025	1/3 Tuition Payment Due
May 21, 2025	Last Day to Receive 75% Tuition Refund
May 26, 2025	Memorial Day- No Class or Clinical
June 1, 2025	Last Day to Receive 50% Tuition Refund
June 17, 2025	Last Day to Receive 25% Tuition Refund
July 4, 2025	Independence Day- No Class or Clinical
August 18-21, 2025	Final Exams Week
August 21, 2025	Graduation

Curriculum Outline

FALL		Clock Hours			
Course	Title	Lecture	Lab	Clinical	Total
AE101	Adult Echocardiography I (Mon-Wed)	135	0	0	135
AE101L	Adult Echocardiography I Lab	0	182	0	182
AE103	Clinical Externship I	0	0	198	198
TERM TOTAL					515
SPRING		Clock Hours			
Course	Title	Lecture	Lab	Clinical	Total
AE201	Adult Echocardiography II	48	0	0	48
AE201L	Adult Echocardiography II Lab	0	112	0	112
AE203	Clinical Externship II	0	0	450	450
AE102	Ultrasound Physics & Instrumentation I	32	0	0	32
TERM TOTAL					642
SUMMER		Clock Hours			
Course	Title	Lecture	Lab	Clinical	Total
AE301	Adult Echocardiography III	45	0	0	45
AE303	Clinical Externship III	0	0	549	549
TERM TOTAL					594
TOTAL CLOCK HOURS:					1751

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9780992322205	A Sonographer's Guide to the Assessment of Heart Disease	Anderson, B	1st	2014	MGA Graphics
9780578687179	Echocardiographer's Pocket Reference	Palma, R	5th	2020	Arizona Heart Institute Foundation
9780962644450	Understanding Ultrasound Physics	Edelman, S	4th	2012	Sidney K. Edelman

Professional Appearance

Students are expected to adhere to the policy cited in the general portion of this catalog. Additionally, Cardiac Ultrasound students are expected to wear navy blue scrubs.

CARDIOVASCULAR PERFUSION

<i>Program Snapshot: Cardiovascular Perfusion</i>	
Program Director	Christopher Koehler, CCP, BS koehlec@ccf.org
Location	Main Campus Building J, J4-604 9500 Euclid Avenue Cleveland, OH 44195
Clock Hours	2894
Program Length	68 weeks / 17 months
Delivery Method	Residential
Total Cost (tuition + fees)	\$32,000

Overview

The Cardiovascular Perfusion Program is an intensive, full-time, 17-month (4 term) program consisting of a rigorous academic schedule and intense clinical education. Students completing the program will graduate with a Certificate of Completion and will be eligible for the American Board of Cardiovascular Perfusion certification examination.

Mission Statement

The mission of the Cardiovascular Perfusion Program is to develop highly trained, professional perfusionists capable of successfully performing clinical perfusion techniques to meet the specialized needs of Cleveland Clinic's Heart & Vascular Institute; perform clinical research to advance the field of perfusion; and to contribute to the education of others.

Objectives

At the completion of the Cardiovascular Perfusion Program, students will be able to:

1. Demonstrate clinical skills in cardiopulmonary bypass and mechanical circulatory devices.
2. Demonstrate clinical skills in autotransfusion, blood conservation, and blood product management.
3. Demonstrate clinical skills in laboratory analysis of blood gases, hematocrit, and coagulation.
4. Integrate perfusion theory to clinical applications.
5. Demonstrate acquired knowledge of various perfusion equipment and supplies used in the healthcare setting.
6. Demonstrate acquired perfusion knowledge and general medical knowledge.
7. Respond appropriately during crisis management.
8. Effectively manage a catastrophic event such as device failure or air emboli.
9. Conduct themselves in a professional manner and function effectively as a member of the healthcare team.
10. Pass the American Board of Cardiovascular Perfusion's Perfusion Basic Science Examination (PBSE) and Clinical Applications in Perfusion Examination (CAPE) meeting AB-CP outcome thresholds.

Institutional Accreditation (Cleveland Clinic)

Programmatic Accreditation

State Approval

30 E Broad St Suite 2481
Columbus, OH 43215
614 466-2752
Scr.ohio.gov

Chris Koehler, CCP, BS Program Director (full-time)

Clifford Ball, CCP, Assistant Program Director (part-time)

Alissa Miller, CCP, Instructor (part-time)

Phone: 216-444-9215 Email: millera132@ccf.org

Vince Tobin, CCP, Instructor (part-time)

Education: Certificate, Perfusion, Cleveland Clinic School of Cardiovascular Perfusion
B.S., Mathematics, Catholic University of America

Phone: 216-444-9215 Email: tobinv@ccf.org

Matt Wittenauer, CCP, Med, Instructor (part-time)

Education: Certificate, Perfusion, Cleveland Clinic School of Cardiovascular Perfusion
B.S., Microbiology, Ohio State University
M.S., Health Professions Education, Cleveland State University

Phone: 216-444-9215 Email: wittenm@ccf.org

Facilities

The Cardiovascular Perfusion Program is located in the J Building on Cleveland Clinic's Main Campus hospital. The program has sufficient classroom and laboratory space and a state-of-the-art cardiac bypass perfusion pump and simulator. Cardiovascular equipment and supplies are available for training students including mechanical circulatory support devices, e.g., extracorporeal membrane oxygenation (ECMO) life support system and left ventricular assist device (LVAD) pump. Instructional textbooks and resources are provided to students, and additional instructional resources are available through Cleveland Clinic's Floyd D. Loop Alumni Library.

Advisory Board

The Cardiovascular Perfusion Program's Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Christopher Koehler	CCP	Program Director, Cleveland Clinic
Clifford Ball	CCP	Associate Program Director, Cleveland Clinic
Faisal Bakaeen	MD	Physician, Cleveland Clinic
Jason Indorf	CCP	Director, Perfusion Services, Cleveland Clinic
Mari Knettle	DPT, EdD	Dean, School of Health Professions, Cleveland Clinic
Daniel Sullivan	PhD, JD	Public
Jen Connell	CCF	Graduate
Gabby Cross		Student

Kristin Ludrosky		HVTI Administration, Cleveland Clinic
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Technical Standards

Perfusionists require certain physical requirements to meet the demands of the profession. They must be able to transfer and move patients. Perfusionists must be able to work in a stationary position for extended periods. They must have the ability to work within guidelines of universal safety precautions, using protective gear. In the workplace, they must be willing to rotate 24-hour coverage (on-call) and be able to work under stressful conditions. They may be required to travel in an ambulance, small airplanes or helicopters for organ procurement.

In addition, students must possess the integrity, intelligence and personal and emotional characteristics to become an effective healthcare professional. The following represent a more detailed description of the physical requirements to succeed in the program.

1. *Sensory and Motor Skills - Students and candidates for program admission should be able to:*
 - a. Move, manipulate (?) and transfer patients in a safe manner.
 - b. Move clinical equipment in a safe and controlled manner.
 - c. Demonstrate basic clinical skills related to the use of extracorporeal equipment, circuitry, and ancillary clinical patient care devices and equipment.
 - d. Execute quick and purposeful movements during emergency treatment of patients.
2. *Communication - Students and candidates for program admission should be able to:*
 - a. Possess excellent communication skills in the English.
 - b. Produce and transmit patient information to members of the healthcare team.
 - c. Communicate with patients effectively with compassion and empathy.
 - d. Possess demonstrated reading skills at a sufficient grade level to accomplish curricular requirements.
 - e. Provide effective care to patients.
3. *Intellectual - Students and candidates for program admission should be able to:*
 - a. Measure, calculate, interpret, analyze, question, compile and evaluate information from various modalities to effectively evaluate extracorporeal equipment and treat patients.
 - b. Comprehend spatial relationships of structures and models.
 - c. Comprehend relationships between patient care parameters and anticipate cause and effect responses based on their actions and inactions.
 - d. Learn through a variety of teaching modalities including classroom lecture, cooperative learning, small group activities, medical simulation and laboratory exercises, individual and group presentations, and the use of technology assisted learning.
 - e. Make rapid decisions in life threatening situations where problem solving and critical thinking are required.
4. *Behavioral and Social Attributes - Students and candidates for program admission should be able to:*
 - a. Demonstrate emotional stability.
 - b. Exercise good judgment, prompt completion of all responsibilities related to care of patients and participation on a patient care team.
 - c. Develop mature and effective relationships with co-workers and patients.

- d. Perform problem solving skills in a timely manner.
 - e. Tolerate physically demanding workloads.
 - f. Function effectively under stress.
 - g. Adapt to changing environments, display flexibility, and learn to function in an environment of uncertainty inherent in the clinical practice of cardiovascular perfusion.
 - h. Practice in a safe manner.
 - i. Respond appropriately to emergencies.
 - j. Treat all patients, families, colleagues, and other members of the health care team with dignity and respect.
 - k. Demonstrate honesty, integrity, dedication, compassion and motivation.
 - l. Accept constructive criticism and respond appropriately with an acceptable modification of behavior.
5. *Observation - Students and candidates for program admission should be able to:*
- a. Visualize information presented in images from paper and projections such as PowerPoint slides and video.
 - b. Observe laboratory, lecture and clinical demonstrations.
 - c. Observe patients and members of the healthcare team accurately at a distance and close.

Admissions Requirements

Applicants must submit evidence of the following before the application deadline:

1. Completion of a bachelor's level or higher degree from a regionally accredited college or university.
2. Completion of the following prerequisite coursework:
 - Anatomy and Physiology I & II, with labs, 8 credit hrs.
 - Chemistry I & II, with labs, 8 credit hrs.
 - Biology I & II, with labs, 8 credit hrs.
 - Statistics, 3 credit hrs.
 - Biochemistry, with a lab, 4 credit hrs.
 - Pharmacology, 1 credit hr.
 - Physics I & II, with labs, 8 credit hrs.
3. A cumulative GPA of 3.0 in all prerequisites with minimum of C in all prerequisite courses.
4. Completed the Cardiovascular Perfusion Program Application and noted attachments.

*Prerequisites do not expire, but it is recommended that the courses were completed within the past 10 years to be a more competitive candidate.

Application Process

Admission to the Cardiovascular Perfusion Program is a selective process that includes an interview.

- Applications will be accepted through the Campus Café system
- To be considered for the January class, all applications must be received by September 1st
- Interviews in September with admissions decisions made by the end of September
- There is a \$20.00 application fee.

Graduation Requirements

Students will be granted a Certificate of Completion as a result of the student meeting the following graduation requirements:

- Complete all didactic courses with at least an 80% grade on all tests, exams and assignments.
- Complete the Clinical Final Exam with at least an 80% grade.
- Successfully perform 150 perfusion cases which includes 10 pediatric observations or pump cases, according to established procedures.
- Complete and present a case study.
- Complete and present a senior project.
- Completion of clinical attendance.

Grading Scale

The Cardiovascular Perfusion Program utilizes the following grading scale:

Scale	Grade	GPA	Definition
90-100%	A	4.0	Excellent
80-89%	B	3.0	Good
70-79%	C	2.0	Satisfactory
60-69%	D	1.0	Unsatisfactory
0-59%	F	0.0	Inadequate/Fail
	P		Pass

Students are expected to obtain an 80% or above on all didactic (classroom) tests and assignments as well as clinical tests/exams. Clinical competencies are graded on a pass/fail basis.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Cardiovascular Perfusion program will occur after completion of the first year's spring semester, summer semester, and fall semester. This will ensure Cardiovascular Perfusion students are meeting the 80% minimum required of the program. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

All classes are **mandatory**. All calendar days of clinical attendance are mandatory through graduation date.

Clinical Start Times

Clinical start times are as follows:

- Early - 6:15AM until Primary Instructor is relieved.
- 12A or 12B - 6:15AM until Primary Instructor is relieved.
- Star - 12:00PM and call in the AM until Primary Instructor is relieved.
- Lates - 1:00PM until Primary Instructor is relieved
- Call – 3:00PM until case is complete or Primary instructor is relieved.

Punctuality

Arriving late or leaving early will account for ½ personal day.

Holidays

The program recognizes the following holidays and breaks: Memorial Day, July 4th, Labor Day, Thanksgiving Thursday & Friday, and Christmas Eve through New Years.

Personal Time Off

Each student has 15 personal days to use at their discretion. They may use a maximum of 10 personal days by Dec. 31st.

Personal days must be scheduled a week in advance. Students may take 4 of 10 unscheduled days off till December 31st and 2 of 5 unscheduled days off from January 1st to graduation. Violations of the Attendance policies are grounds for dismissal.

Make-Up Work Policy

Students with excused absences will be able to make-up any missed didactic or clinical tests/exams/assignments within a reasonable amount of time. Decisions will be made on a case-by-case basis.

Inclement Weather

Students are asked to contact the Program Director or Clinical Coordinator if they are not able to make it to class on time. Tardiness or absence due to inclement weather will not be counted against the student, if the student has called.

Students who request permission to leave early during extreme weather conditions may, with the Program Director's approval, be permitted to do so without using personal time or penalty.

Tuition and Fees

Tuition Total: \$32,000 (includes a \$300 non-refundable tuition deposit)

Payment - \$8,000 installments paid before the beginning of each term

1st term – January 6 (first year)
2nd term – April 28
3rd term – August 18
4th term – January 5 (second year)

Academic Calendar

Date	Calendar Description
January 6, 2025	Term 1 Begins (Cohort A)
January 6, 2025	¼ Tuition Payment Due
January 23, 2025	Last Day to Receive 75% Tuition Refund
February 4, 2025	Last Day to Receive 50% Tuition Refund

February 22, 2025	Last Day to Receive 25% Tuition Refund
May 4, 2025	Term 1 Ends
May 7, 2025	SAP Evaluation

May 5, 2025	Term 2 Begins (Cohort A)
May 5, 2025	¼ Tuition Payment Due
May 21, 2025	Last Day to Receive 75% Tuition Refund
May 26, 2025	Memorial Day – No Class or Clinical
June 1, 2025	Last Day to Receive 50% Tuition Refund
June 18, 2025	Last Day to Receive 25% Tuition Refund
July 4, 2025	Independence Day – No Class or Clinical
August 24, 2025	Term 2 Ends

August 25, 2025	Term 3 Begins (Cohort A)
August 25, 2025	¼ Tuition Payment Due
September 1, 2025	Labor Day – No Class or Clinical
September 11, 2025	Last Day to Receive 75% Tuition Refund
September 17, 2025	Constitution Day – Classes/Clinicals in Session
September 23, 2025	Last Day to Receive 50% Tuition Refund
October 10, 2025	Last Day to Receive 25% Tuition Refund
November 28-29, 2025	Thanksgiving Break – No Class or Clinical
December 20, 2025 – January 4, 2026	Holiday Break – No Class or Clinical
January 4, 2026	Term 3 Ends

January 5, 2026	Term 4 Begins (Cohort A)/ Term 1 Begins (Cohort B)
January 5, 2026	¼ Tuition Payment Due
January 23, 2026	Last Day to Receive 75% Tuition Refund
February 4, 2026	Last Day to Receive 50% Tuition Refund
February 23, 2026	Last Day to Receive 25% Tuition Refund
May 8, 2026	Term 4 and Term 1 End

May 11, 2026	Term 2 Begins (Cohort B)
May 11, 2026	¼ Tuition Payment Due
May 25, 2026	Memorial Day – No Class or Clinical
May 26, 2026	Last Day to Receive 75% Tuition Refund
June 6, 2026	Last Day to Receive 50% Tuition Refund
June 21, 2026	Last Day to Receive 25% Tuition Refund

July 3, 2026
August 23, 2026

Independence Day – No Class or Clinical
Term 2 Ends

August 24, 2026

August 24, 2026

September 7, 2026

September 10, 2026

September 17, 2026

September 22, 2026

October 9, 2026

November 26-27, 2026

December 19, 2026 - January 3, 2027

January 3, 2027

Term 3 Begins (Cohort B)

¼ Tuition Payment Due

Labor Day – No Class or Clinical

Last Day to Receive 75% Tuition Refund

Constitution Day – Classes/Clinicals in Session

Last Day to Receive 50% Tuition Refund

Last Day to Receive 25% Tuition Refund

Thanksgiving Break – No Class or Clinical

Holiday Break – No Class or Clinical

Term 3 Ends

Curriculum Outline

Fall Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
PER101	Perfusion Theory I	48	0	0	48
PER102	Perfusion Theory II	33	0	0	33
PER103	Perfusion Circuit	32	0	0	32
PER100L	Clinical Instruction I	0	0	579	579
TOTAL TERM					692

Summer Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
PER105	Research Seminar I	16	0	0	16
PER106	Perfusion Special Topics	16	0	0	16
PER101L	Clinical Implementation I	32	0	0	32
PER104	Perfusion Theory III	33	0	0	33
PER201L	Clinical Instruction II	0	0	586	586
TOTAL TERM					683

Fall Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
PER201L	Clinical Implementation II	28	0	0	28
PER108	Research Seminar II	16	0	0	16
PER107	Mechanical Circulatory Support	16	0	0	16
PER300L	Clinical Instruction III	0	0	669	669
TOTAL TERM					729

Spring Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total

PER109	Research Seminar III	16	0	0	16
PER400L	Clinical Instruction IV	0	0	774	774
TOTAL TERM					790
TOTAL CLOCK HOURS:					2894

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9781451193619	Cardiopulmonary Bypass and Mechanical Support: Principles and Practice	Gravlee, Glenn P	4th	2016	Wolters Kluwer
9781451137446	A Practical Approach to Cardiac Anesthesia	Hensley, F	5th	2014	Wolters Kluwer
9781975120597	Pathophysiology of Heart Disease: A Collaborative Project of Medical Students and Faculty	Lilly, Leonard S	7th	2021	Wolters Kluwer
9780323958783	Advances in Cardiovascular Technology: New Devices and Concepts	Karimov, J, Fukamachi, K, and Gillinov, M	1st	2022	Elsevier
9798822918573	The Manual of Clinical Perfusion	Lich, B. and D. Mark Brown	3rd	2023	Perfusion.com Publications
9781588296368	On Bypass: Advanced Perfusion Techniques	Mongero, L. and James Beck		2010	Springer-Verlag New York
9781930605152	Pediatric Heart Surgery	May, L. Eliot	6th	2021	Maxishare
9780323847902	Physiology	Berne, R., Levy, M., Koeppen, B., Stanton, B	7th	2024	Elsevier
978078864959	Cleveland Clinic Heart Book	Topol, Eric		2000	Hyperion

Professional Appearance

Students are required to wear a lab coat clinical experience courses. Additionally, scrubs will be issued to all students.

COMPUTED TOMOGRAPHY (CT)

Program Snapshot: Computed Tomography	
Program Director	Halley Majersky, MEd, R.T. (R)(M)(CT)(MR) majersh@ccf.org
Location	CCAC – Building 2 25900 Science Park Drive Beachwood, OH 44122
Clock Hours	420-620
Program Length	36-52 weeks / 9-12 months
Delivery Method	Blended
Total Cost (tuition + fees)	Residential - \$3,360.00 / Blended - \$3,410.00

Overview

The Computed Tomography Program is a part-time, post-primary, 9-12 month (approximately 2 terms) program. Time to complete the program depends on the student's availability for clinic education. Students complete a clinical education experience held at two approved sites where they will obtain the required clinical competencies for Computed Tomography. Upon completion of coursework, clinical education, and required competencies, students will be awarded a certificate of completion and will be eligible to take the American Registry of Radiologic Technologists (ARRT) Computed Tomography post-primary certification exam.

To practice in the state of Ohio as a CT technologist, you must be registered as a radiographer by the ARRT and carry a radiologic license from the Ohio Department of Health. Many hospitals and imaging centers are now requiring their CT technologists be registered in CT by the ARRT.

Mission Statement

To develop exceptional imaging professionals who meet the needs of the community and provide a foundation for lifelong learning.

Objectives

Goal 1: *The student/graduate will be clinically competent.*

- Students will complete required competencies.
- Students will provide appropriate patient care.
- Students will demonstrate clinical competency.
- Students will perform exams safely.
- Students will produce quality diagnostic images.

Goal 2: *The student/graduate will demonstrate professionalism.*

- Students will participate in continuing education or professional development meetings.
- Students will demonstrate professional behaviors.
- Students will demonstrate an understanding of patient confidentiality (HIPAA).

Goal 3: *The student/graduate will demonstrate effective critical thinking.*

- Students will be able to modify routine procedures for non-routine patients.
- Students will effectively critique images to determine if corrective action is required.
- Students/graduates will acquire critical thinking skills and problem-solving abilities that enhance their clinical experience.

Goal 4: *The student/graduate will demonstrate effective communication.*

- Student will demonstrate effective written communication.
- Student/graduate will demonstrate professional verbal communication in the health care environment.

Approval

The Computed Tomography Program is approved and registered by the Ohio State Board of Career Colleges and Schools in accordance with Ohio Revised Code Chapter 3332 (School Registration No. 2165).

Ohio State Board of Career Colleges and Schools
30 E Broad St Suite 2481
Columbus, OH 43215
614 466-2752
Scr.ohio.gov

Faculty

Halley Majersky, MEd, R.T. (R)(M)(CT)(MR), Program Director (full-time)

Education:	Certificate, Radiology, Trumbull Memorial Hospital School of RT B.S., Computed Tomography, Kent State University M.S., Adult Education, Cleveland State University		
Phone:	216-212-0484	Email:	majersh@ccf.org

Kimberly Saghy, BA.S., R.T.(R)(CT)(MR)MRSO, CT/MRI Instructor (full-time)

Education:	Certificate, Adult Education, Cleveland State University A.A.S., Radiography, Lorain County Community College B.S., Healthcare Management, Youngstown State University		
Phone:	216-554-3375	Email:	saghyk@ccf.org

Gabriel Kroupa, MPH, (NM)(MR)MRSO, MRI/RT Instructor (full-time)

Education:	Certificate, Magnetic Resonance Imaging, Cleveland Clinic School of Diagnostic Imaging B.S., Nuclear Medicine, University of Findlay M.S., Public Health, Kent State University		
Phone:	330-904-0341	Email:	kroupag@ccf.org

Facilities

The Computed Tomography Program has sufficient instructional equipment, laboratory supplies, and storage for student use and for teaching the didactic and supervised laboratory education components of the program. The program does not require laboratory space, although classroom space is available to the students for additional study purposes. Classrooms are equipped with computers with internet and intranet and available accessible to students.

The program's equipment and supplies are readily available to support the delivery of the program curriculum. Sufficient supplies are available to accommodate all enrolled students in class, lab and clinical as necessary. Students have access in each classroom to computers with internet and intranet. They are also able to access MyLearning and Trajecs on the computers.

Advisory Board

The Computed Tomography Program's Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Joe Parker	BA	Administrator, Diagnostic Services Institute, Cleveland Clinic
Mark Moore	RT(R)	Education Coordinator, Cleveland Clinic Foundation Cleveland Clinic
Mari Knettle	DPT, EdD, FASAHP	Dean, School of Health Professions, Cleveland Clinic
Halley Majersky	MEd RT(R) (M) (CT) (MR)	Program Director, Cleveland Clinic
Kim Saghy	BS RT(R) (CT) (MR)MRSO	Instructor, Computed Tomography and Magnetic Resonance Imaging Programs, Cleveland Clinic
Christine Clark	RT(R)	Director of Imaging, Euclid Hospital, Cleveland Clinic
Christine DeCorte	RT(R)	Director of Imaging, Fairview Medical Center, Cleveland Clinic
Rick White	RT(R)	Director of Radiology, Akron General Hospital, Cleveland Clinic
Mark Puletti	RT(R)	Clinical Manager Family Health Centers, Cleveland Clinic
Christopher White	RT(R)	Clinical Manager, Lutheran Hospital, Cleveland Clinic
Scott Berg	RT(R)	Director of Imaging, Medina Hospital, Cleveland Clinic

Tera Munaretto	ARDMS	Director Radiology Services, Hillcrest Hospital, Cleveland Clinic
Starla Paige	RT(R)	Director of Imaging, Marymount Hospital/CCHS, Cleveland Clinic
Cynthia Lewis	RT(R)	South Pointe Hospital, Cleveland Clinic
Melanie Huth	RT(R)	Clinical Manager, Family Health Centers, Cleveland Clinic
Scott Klammer	RT(R)	Director of Imaging Services, Regional Hospitals, Cleveland Clinic
TBD		Distance Education Specialist

Technical Standards

1. Candidates must have good eyesight either naturally or through correction. They must be able to see the printed words in a textbook and be able to read and accurately interpret the numbers on a radiographic technique chart.
2. Candidates must have the ability to hear instructions and be able to respond to verbal requests by patients/customers.
3. Candidates must be able to lift a minimum of thirty (30) pounds and possess the ability to support up to 175 pounds. CT technologists must assist, support and move patients from wheelchairs and carts onto examination tables which requires the use of their backs and muscles. CT technologists work while standing, sometimes for hours.
4. Candidates must be able to move around and stand with hands free for long periods of time.
5. Candidates must verbally instruct patients and be able to express concern and empathy for them. Candidates must possess good verbal and nonverbal communications skills as evidenced from the application and interview process.
6. Candidates must be able to perform data entry with dexterity and accuracy.
7. Candidates must be physically and mentally capable of fulfilling the objectives of the CT Program. The school will make reasonable accommodations to assist a student with a disability to advance through the program.
8. Candidates must have sensory function adequate for patient assessment and care. They must possess the physical status needed to provide all aspects of care in a safe manner.

Admissions Requirements

Applicants to the Computed Tomography Program must:

1. Be a registered technologist in radiography, nuclear medicine, or radiation therapy, or a student in the final year of one of the aforementioned programs. Registration must be through The American Registry of Radiologic Technologists (ARRT) or The Nuclear Medicine Technology Certification Board (NMTCB).
2. Must provide school transcripts and receive approval from CT Program Coordinator (students without ARRT or equivalent registration).

Application Process

Applications will be accepted through the Campus Café system. The deadline for applications is July 31st each year. Individuals applying to the CT Program must submit the following documents:

1. Registered technologists must submit a copy of current licensure and certification.
2. A transcript to show final year status. All candidates for admission must be in good standing with their certifying body or current student program.
3. Submit an application form with payment of a non-refundable \$20.00 application fee. Application forms may be downloaded from the website. The deadline for applications is July 31st each year.
4. Proof of health insurance.
5. Proof of current certification in Basic Life Support for Health Care Providers from the American Heart Association.

Rolling Admissions

Students are accepted into the program based on a rolling admission process. Once all spots have been filled for a class, applicants will be placed on a waiting list. If accepted candidates relinquish their positions, candidates will be removed from the waiting list and notified of admission.

Criminal Background Check

Candidates must pass a criminal background check to be accepted into the CT Program. If a candidate does not pass the criminal background check, they will not be allowed to continue in the program. If the candidate plans to attend Akron Children's Hospital for their clinical experience they will be asked to complete further requirements. These requirements will be discussed with the requesting candidate at the time of their clinical rotation.

Safety Screening

All potential CT students shall undergo screening as part of the enrollment process to ensure their own safety in the MR environment. Students shall report any trauma or surgery they may have experienced prior to and at any time during enrollment that may have introduced ferromagnetic material or an implanted device. Appropriate screening of this material to determine the safety of permitting the student in zones III and IV will be completed. Students are required to complete an MR safety screening form and update it at as necessary to document such implants or other foreign bodies.

Forms for the MRI safety and screening are provided to the student by program officials after acceptance into the program.

Graduation Requirements

Upon successful completion of the below courses, clinical program requirements and ARRT requirements, the student is awarded a Certificate of Completion and is eligible for the ARRT registry examination.

To complete the Computed Tomography Program, the following courses must be completed:

- Introduction to Computed Tomography
- Cross Sectional Anatomy and Pathology
- Computed Tomography Physics

- Clinical Experience in Computed Tomography

Additionally, prior to completion of the CT Program, students must meet the following criteria:

- All competencies must be completed as outlined in the Competency Examination Policy.
- Tuition and fees must be paid in full.
- All reference books or other material must be returned.
- All ID badges must be returned, or a fee must be paid.
- Dosimeter must be returned or replacement fee paid.
- Clinical site survey completed.
-

Clinical Requirements for CT

<u>Clinical Requirements for CT*</u>
<i>Clinical rotation 1:</i>
Minimum of 10 competency evaluations
Minimum of 4 student evaluations
Minimum of 50 procedure signatures**
Required CT Safety Form - site specific
<i>Clinical rotation 2:</i>
Minimum of 15 competency evaluations
Minimum of 4 student evaluations
Minimum of 75 procedure signatures**
Required CT Safety Form - site specific

Academic Awards at Graduation

Based on the final cumulative grade point averages achieved by graduates. A graduate with a GPA between 3.5 and 3.99 will be commended as graduating with Academic Honors. A graduate with a GPA of 4.0 will be commended as graduating with Academic Distinction.

Grading Scale

The Computed Tomography Program's grading scale is as follows:

Scale	Grade	GPA	Definition
93-100%	A	4.0	Excellent
84-92%	B	3.0	Good
*75-83%	C	2.0	Satisfactory
67-74%	D	1.0	Unsatisfactory
0-66%	F	0.0	Inadequate/Fail

Students must maintain a "C" grade or better in each course of the CT Program in order to receive a certificate upon completion of all courses. Students not satisfying this minimal academic requirement will be counseled and those receiving a "D" or "F" in any course will not complete the program.

Course grades are reviewed by the instructor and students are counseled as needed throughout the semester. Program faculty monitor student grades throughout the semester and when a student is identified to be at risk of not passing a class, the instructor will either call the student or send an email for them to meet and discuss what approach to take to improve the grade.

Upon receipt of less than a “C” in any course, the student must retake this course at his or her own expense and receive a passing grade to complete the program.

If a student does not complete all required course assignments by the end of the semester, they will receive an incomplete grade. Incompletes must be resolved within 5 weeks into the next semester or the grade converts to an “F” or failing grade.

Students who are dismissed from the program may reapply for acceptance. Their re-acceptance is subject to approval by the program’s Subcommittee on Student Readmission.

Clinical Grades

Students will be given an established number of points for each clinical experience. Each semester clinical grade will be determined by:

1st Clinical Experience Rotation:

<u>Item Required</u>	<u>Number</u>	<u>Points Possible</u>
Evaluations	4	16
Signatures	Minimum of 50	50
Competencies	Minimum of 10	10
CT Safety Orientation	1	5
Clinical Site Evaluation	1	5
Program/Department policies & practices		Four points off for each documented counseling Six points off for each written corrective action Ten points off for each final written corrective action or suspension

2nd Clinical Experience Rotation:

<u>Item Required</u>	<u>Number</u>	<u>Points Possible</u>
Evaluations	4	16
Signatures	Minimum of 50	50
Competencies	Minimum of 15	15
CT Safety Orientation	1	5
Clinical Site Evaluation	1	5
Program/Department policies & practices		Four points off for each documented counseling Six points off for each written corrective action Ten points off for each final written corrective action or suspension

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Computed Tomography (CT) Program will occur after completion of the fall semester. This will ensure CT students are meeting the 75% minimum required of the program. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

Attendance in training programs has been shown to be a reasonable predictor of work attendance during employment. Therefore, attendance during a training program is carefully monitored. In order for a student to remain eligible for Title IV funds, they must maintain a minimum attendance of 90% of the clock hours scheduled. Each student is responsible for properly signing in and out of each class and clinical session.

A monthly review of attendance will be conducted. An alert letter may be issued based on current status. If at any point during the course of the program, it is determined that a student cannot meet the SAP standards, the student's financial aid will be terminated, and the student may be subject to dismissal from the program. The program director or designee may implement academic/attendance probation, or dismissal from the campus. The student may be required to furnish an alternate method of payment.

Grades and attendance are checked each time a financial aid payment arrives for a student.

Make-Up Time

Make up time may be granted, if available, to meet attendance and financial aid requirements for absences caused by reasons an employer would consider acceptable. Make-up time is arranged with program officials and must be approved by an authorized administrator. Make-up time is not intended to allow a student to earn leave time or to improve overall attendance record. Make-up time must be completed within the current payment period and may not exceed 10% of the total monthly required hours.

General Attendance and Timeliness

It is the responsibility of each student to be accountable to the faculty of the school and the clinical preceptors at each clinical site. Please use the following guide to inform the school faculty of any changes to your schedule. Depending on the circumstances, corrective action may result.

Call or email the school faculty:

- If a student is unable to attend class or clinical.
- If a student is running late to class or clinical (include an estimated time of arrival).
- If a student is told to leave clinical for lack of work / patients. The supervising technologist must call or email program officials.
- If a student unexpectedly needs to leave clinical early, notify a program official prior to leaving.
-

Record of Correction Action for Attendance

Records of corrective action for attendance may be reviewed in matters relating to employment references, early graduation, dismissal, and reinstatement after dismissal.

No Call / No Show

This applies when a student does not attend clinicals as scheduled and fails to report off to both the school and the clinical site. Notification received more than one (1) hour after the scheduled start time is

treated as a “no call.”

Excused Absences

Bereavement and jury duty are considered excused absences from class or clinical and therefore do not count toward absences that can cause a course letter grade to drop. Students are responsible for any missed assignments and must make arrangements with their instructor to make up exams and assignments within one week of returning to class.

Failure to Clock In and Out

For each instance that a student forgets to clock in or out, they must provide a time verification from a technologist to verify actual start/end times. Further documentation must be made to explain tardiness or early dismissal from the clinical site.

School Closure

Class and/or clinical may be canceled only by the program director or designee. Closure of the school as a result of inclement weather or other emergency situation will be communicated via text or email. Students are not to call the school or text program officials to inquire as to canceling of class or clinical.

Continuing Education

The American Society of Radiologic Technologists ASRT requires that students are present for all lectures in entirety to receive credit for the course. Students may not miss any classes for CE credit to be awarded.

Grade Drop for Excessive Absences

A student can miss no more than 2 lecture classes without penalty. Any absence after the allotted amount will drop the final grade by one letter for each absence unless an extended illness is involved or a special circumstance exists and the student brings in an approved excuse (examples of an approved excuse includes a physician's excuse, jury duty summons, or bereavement). An excuse must be turned in to the instructor within 1 week of the date the student returns to class. If a student fails to do this, the absence will be counted as an unexcused absence. It is the responsibility of the student to contact the instructor when an extended absence occurs. The student is required to meet with the course instructor upon return to class to assess missed assignments and set a timeline for completion of all missed work.

Clinical Education Specific Attendance

Attendance and punctuality are seen as essential qualities for your chosen profession. Timeliness is essential at the clinical site as it can be a direct indicator of what type of employee you may become. It is the student's responsibility to inform the school **and** the clinical site if they are running late, will be absent, or have scheduled time off. Please make time allowances for weather, traffic and other circumstances that may cause a delay.

1. Students are not to clock in more than 15 minutes before their scheduled start time at clinical.
2. Students are expected to be in their assigned area and ready to work at their official start time.
3. Students must utilize the program timekeeping system upon arrival and departure.
4. A student will receive 0.50 points if:
 - They are one minute late.
 - Takes an extended lunch period.

- Leaves before the end of their scheduled time.
5. A 30-minute lunch break is required when a student is at the clinical site for more than five (5) hours.
 6. If a student leaves the facility for lunch or any other reason, they are ~~is~~ required to clock out and back in.
 7. Students cannot attend clinical in excess of 10 hours per day.
 8. Students may not exceed 40 hours in a week of clinical time (Sunday-Saturday).
 9. Severe weather or driving conditions as deemed by program director may be considered an excused tardy.

Disciplinary Points Chart

Infraction	Points
Absent	1.0
Failure to Clock In or Out	.50
Failure to Notify School and/or Site	1-2
No submitted schedule in MyLearning	.25
Schedule change made less than 24 hours	.25
Scheduled time doesn't match Trajecsys times	.50
Tardy / Leaving Early	.50
Works less than 4 hours per day or 15 hours per week	.50

Tardy / Leaving Early

Students are expected to be at their assigned area, ready to start when their shift begins, and stay until the shift ends. When a student clocks in beyond their scheduled start time (i.e. one (1) minute after scheduled start time), or clocks out before the end of their shift (i.e. one (1) minute before end time), they will be considered tardy.

Tuition and Fees

Total Tuition

CT Program Traditional: \$3,360.00

CT Program Online: \$3,410.00

Individual Courses:

Introduction to CT Online: \$480.00

Cross Sectional Anatomy & Pathology \$710.00

CT Physics: \$710.00

CT Physics Online: \$760.00

CT Clinical: \$1,430.00

Additional Expenses:

Onboarding fee: \$30.00

Application fee: \$20.00

Installment plan fee: \$25.00

Acceptance fee: \$100.00 applicable toward first semester tuition

Textbooks (estimated): \$400.00

ARRT Registry Exam: \$200.00 (\$400.00 if using NMTCB or ARDMS as supporting category)

Uniforms (estimated): \$250.00

Financial Aid

The CT Program participates in the Post 911 GI Bill®. Please contact the United States Department of Veteran Affairs for current information. Information can also be found online at www.us-gibillschools.com.

The program will assess no penalty, including the assessment of late fees, the denial of access to classes, libraries or other institutional facilities, or the requirement that a Chapter 31 or Chapter 33 recipient borrow additional funds to cover the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment by the U.S. Department of Veterans Affairs. Students can obtain information regarding the federal governments' Lifetime Learning Credit and Hope Scholarship at www.irs.gov. In addition, students can search the Cleveland Foundation website to see if they meet the eligibility requirements of the various scholarships at www.clevelandfoundation.org. Cleveland Scholarship Program information is available at www.cspohio.org.

Students are encouraged to apply for the annual Ohio Society of Radiologic Technologists (OSRT) grants. Applications and guidelines are available on the OSRT website at www.osrt.org and students are notified when the deadline is each year. The OSRT grants are distributed at the annual meeting. The student need not be present to be awarded a grant. Students may also be eligible for an annual American Society of Radiologic Technologists (ASRT) scholarship. Information on the ASRT scholarship is available online at www.asrt.org and will also be distributed to the students as it becomes available to the program.

Academic Calendar

Date	Calendar Description
August 19, 2024	Fall Semester Begins
September 2, 2024	Labor Day – No Class or Clinical
September 5, 2024	Last Day to Receive 75% Tuition Refund
September 17, 2024	Last Day to Receive 50% Tuition Refund
September 17, 2024	Constitution Day – Classes/Clinicals in Session
October 4, 2024	Last Day to Receive 25% Tuition Refund
October 14-18, 2024	Fall Break – No Class or Clinical
November 28-29, 2024	Thanksgiving Break - No Class or Clinical
December 8-13, 2024	Final Exam Week
December 16, 2024 – January 3, 2025	Semester Break - No Class or Clinical

January 6, 2025

January 23, 2025

February 4, 2025

February 21, 2025

March 3-7, 2025

April 28 – May 2, 2025

May 2, 2025

May 5-16, 2025

Spring Semester Begins

Last Day to Receive 75% Tuition Refund

Last Day to Receive 50% Tuition Refund

Last Day to Receive 25% Tuition Refund

Spring Break - No Class or Clinical

Final Exam Week

Graduation

Semester Break – No Class or Clinical

May 19, 2025

May 26, 2025

May 31, 2025

June 8, 2025

June 20, 2025

July 4, 2025

August 4-8, 2025

August 11-22, 2025

Summer Semester Begins

Memorial Day - No Class or Clinical

Last Day to Receive 75% Tuition Refund

Last Day to Receive 50% Tuition Refund

Last Day to Receive 25% Tuition Refund

Independence Day – No Class or Clinical

Final Exam Week

Semester Break - No Class or Clinical

Monday, August 25, 2025**Fall Semester Begins****Curriculum Outline****Fall Term****Clock Hours**

Course	Course Title	Lecture	Lab	Clinical	Total
CT104	*Introduction to CT Online	24	0	0	24
CT102	Cross Sectional Anatomy & Pathology	48	0	0	48
TOTAL TERM					72

Spring Term**Clock Hours**

Course	Course Title	Lecture	Lab	Clinical	Total
CT103 OR CT201	*CT Physics (CT103 traditional or CT201 online)	48	0	0	48
CT200	CT Clinical Rotation	0	0	Hours vary	Hours vary
TOTAL TERM					48 (+rotation)

Summer Term**Clock Hours**

Course	Course Title	Lecture	Lab	Clinical	Total
CT200	CT Clinical Rotation continues (if needed)	0	0	Hours vary	Hours vary

**CLINICAL
EXPERIENCE**

Clinical Experiences occur in spring & summer semesters. The number of hours vary and depend on the student's availability to complete during these terms. Students must complete 300-500 clinical experience hours to meet graduation requirements.

15-40* 300-500

*Online delivery—Not eligible for VA Benefits

TOTAL TERM 300-500

TOTAL CLOCK HOURS: 420-620

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9781133960867	Fundamentals of Sectional Anatomy: An Imaging Approach	Lazo, D.	2nd	2014	Cengage
9781133960850	Workbook to Accompany Fundamentals of Sectional Anatomy: An Imaging Approach	Lazo, D.	2nd	2014	Cengage
9781260121940	CT & MRI Pathology: A Pocket Atlas	Grey, M. & Ailinani, J.	3rd	2018	McGraw Hill
9780323790635	Computed Tomography: Physical Principles, Clinical Applications, and Quality Control	Seeram, E.	5th	2022	Elsevier

Professional Appearance

Uniforms

Uniforms consist of either navy blue uniform tops (scrub) and white pants (scrub) or white uniform tops (scrub) and navy-blue pants (scrub). Warm-up jackets may be included but must be the same color as the uniform tops. Sweaters and sweatshirts are not permitted.

1. Shirts (tanks, t-shirts, turtlenecks) both long or short sleeved may be worn under the uniform but must be solid white. If wearing a long sleeve white shirt, the shirt may not extend beyond the wrist and may not have thumbholes. No decals, designs or words are permitted on the undershirts. Crew- neck shirts are highly recommended under V-neck uniform tops. If a short-sleeve t-shirt is worn underneath a short-sleeve uniform top, the sleeves of the t-shirt must not hang below the uniform top sleeves. $\frac{3}{4}$ sleeve length tops are not permitted.
2. CT students are permitted to wear street clothes to class and not uniforms so this isn't necessary.
3. All shirts and jackets must have the school patch sewn on the left sleeve, two fingers down from the top of the left shoulder seam.
4. Uniforms must be freshly laundered and wrinkle-free each time they are worn.
5. Socks/hosiery must be solid white.

6. Undergarments should not be visible beneath the uniform.
7. Shoes must be either white, black, navy or grey athletic shoes, or any combination of these colors. They must not have any different colored stitching, stripes, insignias, etc. and must always be kept clean.
8. The Cleveland Clinic ID badge must be worn at all times, with the name and photo visible, at the chest or collar level.
9. Hospital provided scrubs may only be worn in surgery and must be returned before leaving the clinical site.

CYTOLOGY

<i>Program Snapshot: Cytology</i>	
Program Director	Bridgette Springer, MBA, CT(ASCP) ^{CM} springb@ccf.org
Location	Main Campus L Building, Room L1-371 9500 Euclid Ave. Cleveland, OH 44195
Clock Hours	2192
Program Length	52 weeks / 12 months
Delivery Method	Blended
Total Cost (tuition + fees)	\$7,500

Overview

The Cytology Program is a full time, 1-year (2 terms) post baccalaureate certificate training program consisting of didactic and practical instruction in the basics of cytologic diagnosis. Preparation of cytologic slides and the microscopic detection and diagnosis of the cells seen are only a portion of the responsibility of the cytologists. Didactic instruction includes anatomy, histology, correlation of cellular findings to other clinical information, adjunct testing, and laboratory management as they relate to cytology. Classes will begin in early July and conclude the last week of June the following year. Students must successfully complete the entire course of study to obtain a certificate of completion and be eligible to take the American Society for Clinical Pathology (ASCP), Board of Certification Cytology examination.

Mission Statement

To promote an excellent learning experience for a diverse population of health professions students in the Cleveland Clinic health system so that they may become providers of the best care to patients as members of the interprofessional care team.

Objectives

The primary goal of the Cytology Program is to provide the students enrolled in the program the cognitive (knowledge), psychomotor (skills) and affective (behaviors) necessary to enter into a career as a cytologist. The training will be designed so that at least entry level abilities are attained by the graduating students in gynecologic, non-gynecologic and fine needle aspiration cytopathology, ensuring they are able to become contributing members of the Cytology community. It is, therefore, the responsibility of the faculty to assist the students in the acquisition of basic screening and detection skills and to guide them through a curriculum that will give them the scientific knowledge necessary to perform accurately and with integrity. The curriculum will contain elements that address all aspects of the profession including ethics, professional attitudes, decision making, teamwork, and management issues in addition to the cytologic skills necessary to make accurate diagnoses from a wide variety of body sites. To this end it is also a goal of this program to prepare students to take and pass the Board of Certification examination given by the Board of Certification of the American Society for Clinical Pathology.

The students will also complete training and be certified to screen not only conventional Pap tests but ThinPrepTM and SurePathTM Pap tests as well. They will also be certified to operate the equipment supporting these two methods of slide preparation. These state-of-the-art technologies will make our graduates marketable locally and nationally.

An additional goal of the school is the introduction of students to various other adjunct technologies such as, but not limited to, flow cytometry, immunohistochemistry, molecular diagnostics and small biopsy techniques. As morphologists, cytologists with a background in molecular diagnostics will be able to use their skills in a more diverse market.

Accreditation

Institutional Accreditation

Cleveland Clinic is accredited by The Joint Commission

One Renaissance Blvd.
Oakbrook Terrace, IL 60181
Phone: 630-792-5000
www.jointcommission.org

Programmatic Accreditation

The Cytology Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Cytology Programs Review Committee.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 113th Street N., #7709
Seminole, FL, 33775-7709
(727) 210 - 2350

Faculty

Bridgette Springer, MBA, CT(ASCP)^{CM}, Program Director (full-time)

Education: Certificate, Cytotechnology, Anisa I. Kanbour School of Cytotechnology,
Magee-Women's Hospital of University of Pittsburgh Medical Center
B.S., Biology/Cytotechnology Track, Slippery Rock University
M.B.A., Healthcare Management, Western Governors University

Phone: 216-445-8524

Email: springb@ccf.org

Jessica Di Marco, CT(ASCP)^{CM}, Education Coordinator, Laboratory Education Specialist (full-time)

Education: Certificate, Cytotechnology, Cleveland Clinic School of Cytotechnology
A.A.S., Science, University of Akron
B.S., Biology, University of Akron

Phone: 216-337-8149

Email: dimarcj@ccf.org

Facilities

Program facilities are located in L1-363 Pathology Education which includes 2 classrooms, 1 student laboratory, and student cubicles. Each classroom is equipped with an audio video system to host in-person and virtual education. One of the classrooms contains a 7-headed microscope to hold slide reviews and review sessions. The student laboratory contains large workbenches, a T2000 ThinPrep Processor, a sink, a centrifuge, a refrigerator and storage of personal protective equipment, reagents, supplies and materials. There are 9 student cubicles, each has a network computer and a microscope (6

manual microscopes and 3 Hologic Imager microscopes). There are also overhead storage compartments and 3-drawer cabinets.

Faculty are provided cubicles with network computers, overhead storage compartments, and microscopes (1 manual microscope and 1 double-headed microscope). The program director's cubicle houses the large storage cabinet for all teaching sets, storage of educational materials (including study sets and textbooks) and locked storage for student files.

Advisory Board

The Cytology Program's Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Barbara Zingale	MSIT, MLS(ASCP) ^{CM}	Program Director, Medical Laboratory Science Program, Cleveland Clinic
Joan Iacobaci	M.Ed.	Public Member, Kent State University Department of Biological Sciences Senior Academic Advisor I
Chetan Kapoor	MBA	Distance Education Specialist, External, John Carroll University Director of Instructional Technology
Jordan Reynolds	MD	Physician, External, Mayo Clinic Director of Cytology
Jennifer Brainard	MD	Physician, Internal, Program Medical Director, Cleveland Clinic
Dawn Underwood	MS, CT(ASCP)	Employer, Internal, Cytology Manager, Cleveland Clinic
Mari Knettle	DPT, EdD, FSAHP	Sponsor Administration, Dean, School of Health Professions, Cleveland Clinic
Paul Suchy	DM, MSM, MT(ASCP)	Sponsor Administration, Pathology and Laboratory Medicine, Pathology Education Administrator, Cleveland Clinic
Sean Williamson	MD	Sponsor Administration, Pathology and Laboratory Medicine, Pathology Education Vice Chair, Cleveland Clinic
Jessica Di Marco	CT(ASCP) ^{CM}	Faculty, Laboratory Education Specialist, Education Coordinator, Cleveland Clinic

Bridgette Springer	MBA, CT(ASCP) ^{CM}	Faculty, Program Director, Cleveland Clinic
Kari Golphin	CT(ASCP) ^{CM}	Graduate, External, ProPath Cytology Team Leader
Jessica Coyne	CT(ASCP) ^{CM}	Graduate, Internal, Cytologist, Cleveland Clinic
Hannah Maycon	MA	Student

Technical Standards

1. Sensory and Motor Skills - Students and candidates for program admission should be able to:
 - a. Work in small spaces
 - b. Move objects up to 10 pounds with occasional carrying of objects up to 20 pounds including laboratory supplies and equipment
 - c. Perform work in a stationary position for extended periods
 - d. Work with physical files, including retrieving, moving and filing
 - e. Operate and maintain laboratory equipment
 - f. Operate a computer keyboard at a moderate skill level
 - g. Operate a microscope
 - h. Travel throughout the hospital system and, in some locations, off-site
 - i. Tolerate physically demanding workloads
2. Communication - Students and candidates for program admission should be able to:
 - a. Communicate, exchange accurate information and follow instructions
 - b. Maintain comprehensive records of findings, ensuring clear, concise, and timely reporting of results
3. Intellectual - Students and candidates for program admission should be able to:
 - a. Learn through a variety of teaching modalities including classroom lecture, cooperative learning, small group activities and laboratory exercises, individual and group presentations, and the use of technology assisted learning
 - b. Operate at a fast pace and to prioritize multiple assignments/projects and respond to numerous requests
 - c. Diagnose, problem solve, make decisions and critically think
4. Behavioral and Social Attributes - Students and candidates for program admission should be able to:
 - a. Demonstrate emotional stability, maturity and good judgment
 - b. Value all people throughout the organization, regardless of background or culture
 - c. Demonstrate dependability and responsibility
 - d. Exercise self-control and tolerate stress when dealing with multiple requests and/or conflicting demands
 - e. Resolve conflicts, to work collaboratively, respectfully and with dignity with a team
 - f. Perform problem solving skills in a timely manner
 - g. Function effectively under stress to maintain poise and control and practice in a safe manner
 - h. Adapt to changing environments, display flexibility, and learn to function in an environment of uncertainty
 - i. Demonstrate honesty, integrity, dedication, compassion and motivation
 - j. Accept constructive criticism and respond appropriately with an acceptable modification of behavior
 - k. Transfer of knowledge and laboratory skills to problems other than those set in the course of instruction, but that lend themselves to similar types of solutions
5. Observation - Students and candidates for program admission should be able to:
 - a. Assess images electronically and on paper

- b. Observe laboratory, lecture and clinical demonstrations
- c. Differentiate color, hue, saturation and tones
- d. Compare and contrast small details

Additional Occupational Health Testing Upon Enrollment

Students must complete the color discrimination test and the respirator fit test through the Cleveland Clinic's Occupational Health department located in H18. These tests are performed after the first day of class within the first month of the program.

Color Discrimination Testing

The Cytology Program requires a colorblindness determination for each student enrolled in the program. It is possible to be a cytologist and be colorblind since cytologic diagnosis is done by morphology, but color is often used to describe certain cell types and changes in cells. It is imperative that the program be aware of any student who is colorblind so that the faculty can make changes in how cells are described to emphasize the morphology over any colors seen. No student will be eliminated from the program based solely on colorblindness.

Students enrolled in the program who are colorblind will be afforded extra microscopic sessions to help overcome any difficulties they may have with microscopic diagnosis. It is the responsibility of the student to request this additional help. Students who are colorblind are required to achieve passing scores on all visual tests and have acceptable screening scores in order to complete the program.

UroVysion testing uses various colored fluorescent tags on probes that must be assessed microscopically. Students who are colorblind will be unable to perform this test and will be offered an alternative classroom experience during that portion of the course.

Students enrolled in the program should have Occupational Health assess the colorblindness test. Occupational Health is located in H18. The test should be completed with a printed form for documentation submitted to the Program Director by end of the first month of classes.

Respirator Fit Testing

The Cytology Program requires a respirator fit testing due to the students' involvement with rapid on-site evaluation (ROSE) of fine needle aspiration specimens. The clinical rotations including EBUS, EUS/Radiology and FNA may require droplet precautions to be followed and students must be aware of the correct usage of a respirator.

Students enrolled in the program should have a respirator fit test in Occupational Health in H18 and receive documentation of their testing to give to the Program Director. The documentation will be kept in the student's file.

Admissions Requirements

To be considered for admission, applicants should demonstrate a capacity for academic achievement and must meet the following minimum criteria:

1. A minimum of a baccalaureate level degree from an accredited college or university
2. Overall GPA of 3.0 (4.0 = A), and a 3.0 minimum GPA in all Science and Mathematics courses
3. Completed 28 semester hours or 42 quarter hours of Biology and Chemistry
4. Strongly recommended courses include, but are not limited to:
 - General Biology
 - Anatomy and Physiology
 - Cell Biology

- Histology
 - Immunology
 - Microbiology
 - Molecular Biology
5. 3 semester hours or 4 quarter hours of Mathematics
 6. Foreign applicants must have permanent resident status

Application Process

Applications will be accepted through the Campus Café system.

The application file will not be considered complete until the following documentation has been received:

1. Application
2. Transcript evaluation
3. Transcripts from all institutions attended
4. Résumé
5. 3 letters of recommendation and 3 reference evaluation forms
6. If applicable, foreign credential evaluation and TOEFL scores (request these from the Program Director).

The evaluation of applicants begins after all application materials have been received. It is the responsibility of the applicant to monitor the application process. Incomplete applications will not be considered and applicants will be notified in writing of their ineligibility.

Important Dates (2024 - 2025)

- **March 15:** All completed applications including the reference letters, transcripts, and transcript evaluations when required, must be postmarked by this date.
- **April 30:** All interviews for eligible candidates will be complete by this date.
- **May 15:** All applicants will be notified in writing of their acceptance status by this date.
- **June 30:** Ineligible applicants may have their applications considered for the following year by informing this program of their intent in writing by this date.
- **Second full week of July:** Classes begin.

Graduation Requirements

Students who have successfully completed all aspects of the curriculum and have demonstrated competence based on screening ability; those who have completed program objectives demonstrated through:

- Daily work
- The achieving of a 98% gynecologic screening record with 50 cases completed in 1 day,
- And test scores of at least a C average for each section of the curriculum are eligible for graduation from the Cytology Program

Students will receive a post graduate certificate for the program. This certificate will serve as documentation of successful completion of the program.

Students who do not successfully complete the requirements of the program will not be eligible for graduation, will be dismissed from the program and will not be eligible to take the Board of Certification examination for Cytology.

Graduating students are required to attend this event. The time, date and number of guests allowed will be determined during the last quarter of the program.

On the last day of class, prior to graduation, students will be asked to surrender all materials belonging to the school including books and slides. They will also turn in ID Badges, lab coats and parking stickers. Graduating students may make arrangements with the Program Director to return to the lab for study purposes prior to the registry examination, should they so desire.

Grading Scale

A gradebook will be maintained for each student. A combination of all activities and grades along with MyLearning exam grades will be tracked on the spreadsheet to calculate a final comprehensive GPA. The grading scale for the Cytology Program will be as follows for both online and microscopic screening examinations:

Scale	Grade	GPA	Definition
93-100%	A	4.0	Excellent
86-92%	B	3.0	Good
80-85%	C	2.0	Satisfactory
0-79%	F	0.0	Inadequate/Fail

Remedial Testing

Remedial work will be determined based on area of failure.

After exam failure, students will complete remedial work assigned and will NOT be eligible to retake the exam.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Cytology program will occur after the completion of each quarter of the program (typically October, January, April, and Last week of June). This will ensure Cytology students are meeting the 80% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

Students should be advised that attendance will be a portion of each quarterly evaluation and will be part of the overall program grade.

Cytology students are classified as full time (40 hours per week), temporary students in a Cleveland Clinic internal health professions education program. They are supervised by the faculty of the Cytology Program and will be expected to follow the regulations of the program with regard to attendance as outlined below.

Cytology students are training to become professionals. It is, therefore, reasonable that each student should be in attendance 40 hours per week as assigned, and develop attitudes and habits characteristic of professionals.

Students are required to:

- Attend ALL scheduled lecture and laboratory assignments, arriving on time and demonstrating respect for the speaker/instructor and an interest in the material being presented.
- Complete all daily assignments and use spare time during the scheduled eight-hour day to work on studies or assigned projects
- Be in attendance AND available between the scheduled hours of 7:30 am and 4:00 pm each day with 45 minutes allotted for lunch.

- Be patient and flexible, aware that patient work comes first. Instructors may need to occasionally reschedule events that have been previously scheduled.
- Make a reasonable attempt to attend class in adverse weather conditions. (Please refer to the severe weather policy)

Each student's general attitude, attendance record and promptness is considered when judging dependability and willingness to accept responsibility. Attendance will be a portion of each quarterly evaluation and will be part of the professionalism grade. Attendance is generally discussed, as references for jobs are solicited from the program.

Students will be required to punch in and out daily using the Cleveland Clinic Kronos System. Kronos will be reviewed and if necessary, corrected, by the Program Director on a weekly basis.

Absences are classified as "excused," "unexcused," "tardy," or "virtual". Students must call or text at least one hour prior to the designated start time to report an absence for illness. A call or text must be made to the Program Director's cell phone (216-379-8300). If the Program director is not available, the student must leave a message for each day of absence. If more than (1) day is missed during a section of the curriculum that time must be made up under the direction of the Program Director. Habitual or excessive absences may result in expulsion from the program.

Students who are absent for three days (consecutive or otherwise) and fail to notify the Program Director shall warrant immediate termination. When the above occurs, the Program Director will attempt to notify the student by phone on the first day to determine the reason for absence and to advise the student of this policy. If this attempt is unsuccessful, a certified letter, return receipt requested will be sent.

Absences are classified as "excused," "unexcused," "tardy," or "virtual" as defined below.

Excused Absences

The program recognizes the following instances as excused absences:

- Cleveland Clinic Holidays
- Scheduled break days
- Funeral leave (up to 3 days for immediate family)
- Jury duty
- Military duty
- Attendance at a cytology related professional meeting
- Job interview
- Illness (doctor excuse needed for illness lasting more than 3 days)
- Extenuating circumstance or requested absence pre-approved by Program Director

Unexcused Absences

Any absence not listed above will be considered unexcused.

Failure to comply with the call in time frame (1 hour) will result in an unexcused absence.

Each occurrence will result in progressive disciplinary action

Tardy

Tardiness is defined as arriving more than 15 minutes after the scheduled start time. Leave early is defined as leaving 15 minutes before the scheduled end time. After the second occurrence of an unexcused tardy/leave early each occurrence will result in a reduction in the course laboratory grade. Continued tardiness may result in progressive disciplinary action.

Virtual Absences

Students may still participate in daily activities from home to ensure students do not need to make-up work or get behind in studies. Virtual days should be used if the student is exhibiting symptoms of an

illness, can still participate in activities virtually but should not attend in-person to prevent spread of illness. Communication to the Program Director is same as all other absences. Virtual days will be limited to a maximum of 5 days per year.

Make-Up Work

Students will be asked to work on daily assignments or use the time for study should a change of this type arise. Missed lectures or bench training will be rescheduled in a timely fashion so as not to impede the flow of the curriculum.

Students who are absent when a test is given will have the opportunity to make up the examination provided the absence is excused. It is the responsibility of the student to coordinate a time for the make-up examination with the Program Director within 5 school days. Unexcused absence for an examination will result a failing grade for that exam.

Recording Attendance

Students are required to punch in and out daily using the Cleveland Clinic Kronos System. Kronos will be reviewed and if necessary, corrected, by the Program Director on a 2 week basis.

Requested Absences

Students are expected to be in attendance at all other times during the school year, but a student may ask for limited time off due to extenuating circumstances. This request must be made in writing as soon as possible and will be granted or denied at the discretion of the Program Director in consultation with the Medical Director.

Inclement Weather

Classes for the Cytology Program may be cancelled when Cleveland Municipal School District suspends classes for excess snow or ice. The Program Director will contact all students via text message to inform them of this. Classes will take place when that school system is closed due to low temperatures.

In the event of severe weather, students are expected to make a sincere effort to get to Cleveland Clinic for class unless classes are cancelled. We realize that it may be impossible due to snow or other severe weather conditions. Students are required to contact the Program Director in the event they are unable to travel to Cleveland Clinic when classes are in session by calling 216-445-8524 or 216-379- 8300. (If the Program Director is not in the office the student must leave a voice message or the absence will be treated as unexcused.)

The option of a virtual day will be discussed by the Program Director who will make the final decision by 10 p.m. the day prior.

Any student missing class due to severe weather is responsible for discussing the work missed, including lecture(s) and making arrangements to complete the work missed. The Program Director will decide the best course of action to complete the work so that it doesn't impact the student's educational progress.

Emergency School Closure Plan

In the event of an emergency closure, the students will not be required to attend classes. The closure will be determined by the Institute and continued learning will take place online to complete didactic portions of the curriculum. If a possible extended closure is mandated, the clinical and technical portions of the program will be completed upon re-opening of the school and the facilities.

Leave of Absence

Due to the rigorous, continuous nature of the required curriculum of this program students may not be allowed leave of absence. Any student with an emergency requiring an extended absence from the program can submit an LOA request to the office of the Registrar but may not be allowed to continue for the remainder of the academic year. In some cases of a denied LOA request, students may petition the program to be admitted for the portion of the program that was missed to be made up during the following academic year. The granting of this will be made by the program in consultation with the Advisory Board.

Absence or Tardiness for Exams

If the student is absent (excused absence only) when an exam is given, it is the student's responsibility to coordinate a make-up date for the exam with the Program Director within 5 school days. Unexcused absence for an examination will result in a failing grade for that exam.

Other Attendance Issues

All other attendance issues will be handled in accordance with the School of Health Professions Attendance Policy as it pertains to students determined by the faculty of the program. All attendance policies will be modified at the discretion of the Program Director.

Tuition and Fees

Current tuition is \$7,500. All students are responsible for their own tuition payments unless they have secured payment through an outside agency.

Financial aid is not available to students through the Cytology Program but students will be made aware of scholarship opportunities available to them throughout their year of training.

Payment being made to the Cytology Program can be made in a lump sum or in two installments of \$3,750 each. If paying in installments, the first payment is due the first week of training and the second is due no later than September 30th. Other arrangements may be made for the payment of the tuition, if necessary, by speaking with the Program Director during the first week of class.

Students that do not pay tuition within the agreed upon timeframe will no longer be eligible to participate in the program until such time as the tuition is paid. Any decisions regarding tuition payments and due dates are at the sole discretion of the Program Officials.

Academic Calendar

Date	Calendar Description
July 8, 2024	First Day of Classes
August 1, 2024	Last Day to Receive 75% Tuition Refund
August 18, 2024	Last Day to Receive 50% Tuition Refund
September 2, 2024	Labor Day – No Class or Clinical
September 12, 2024	Last Day to Receive 25% Tuition Refund
September 17, 2024	Constitution Day – Classes/Clinicals in Session
November 25 –29, 2024	Thanksgiving Break - No Class or Clinical
Friday, Dec. 20, 2024	Last day of Term

December 23, 2024 – January 1, 2025

Semester Break - No Class or Clinical

January 2, 2025

January 28, 2025

February 15, 2025

March 14, 2025

April 18-21, 2025

May 26, 2025

June 30, 2025

2nd Term Begins

Last Day to Receive 75% Tuition Refund

Last Day to Receive 50% Tuition Refund

Last Day to Receive 25% Tuition Refund

Easter Break - No Class or Clinical

Memorial Day – No Class or Clinical

End of Program

Curriculum Outline

TERM 1		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
CYTO501	Introduction to Cytopathology	5	1	3	9
CYTO505	Cytopreparation	4	130	2	136
CYTO510	Gynecologic Cytopathology	61	1	83	145
CYTO515*	Gynecologic Cytology Practicum	0	54	838	892
CYTO520	Respiratory Cytopathology	18	0	8	26
CYTO570*	The Future of Cytopathology	3	281	12	296
CYTO601*	Independent Study	8	0	123	131
TOTAL TERM					1,635
TERM 2		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
CYTO530	Effusion Fluid Cytopathology	9	0	29	38
CYTO540	Gastrointestinal Cytopathology	10	0	14	24
CYTO550	Genitourinary Cytopathology	10	0	15	25
CYTO560	Fine Needle Aspiration Cytopathology	13	0	23	36
CYTO580	Non-GYN Cytology Practicum	8	112	268	388
CYTO600	Laboratory Operations	3	0	43	46
TOTAL TERM					557
TOTAL CLOCK HOURS:					2192

*Year-Round Course

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9780323636360	Cytology: Diagnostic Principles and Clinical Correlates	Cibas/Ducatman	5 th	2021	W.B. Saunders
9780891894209	The Pap Test	DeMay	1 st	2005	ASCP Press
9783319110738	The Bethesda System for Reporting Cervical Cytology	Henry/Nayar	3 rd	2015	Springer
9783319605692	The Bethesda System for Reporting Thyroid Cytopathology	Ali/Cibas	3 rd	2023	Springer
9783031266614	The Milan System for Reporting Salivary Gland Cytopathology	Faquin/Rossi	2 nd	2023	Springer
9783030886851	The Paris System for Reporting Urinary Cytology	Rosenthal/Wojcik/Kurtycz	2 nd	2022	Springer
9780891893523	The Manual of Cytotechnology	Keebler/Somrak	7 th	1993	ASCP Press
9780781719285	Koss' Diagnostic Cytology and its Histologic Bases	Koss	5 th	2005	Lippincott Williams and Wilkins
9780891896357	Cytopathology Review Guide	Holladay	4 th	2015	ASCP Press
9789352700462	Cytopathology Review	Fan/Damjanov	2 nd	2017	Jaypee
9780891896449	The Art and Science of Cytopathology	DeMay	2 nd	2012	ASCP Press
9780323879019	Diagnostic Pathology: Cytopathology	Mody/Thrall/Krishnamurthy	3 rd	2022	Elsevier
9780930304942	College of American Pathologists Practical Guide to Gynecologic Cytopathology: Morphology, Management, and Molecular Methods	Wilbur/Henry	1 st	2008	ASCP Press
9781461449324	Cytopreparation: Principles & Practice	Gill	1 st	2012	Springer
9781455751952	Comprehensive Cytopathology	Bibbo	4 th	2014	Saunders

Supplementary texts are available in the Program Director's Office or in the Cytology Library (L1-361). You can use them at any time in your studies, and they can be signed out for overnight use, provided they are returned each day.

Professional Appearance

Students should follow the policy for student professional appearance in the general portion of this catalog. In the laboratory, scrubs or business casual attire is allowed and must contain long pants or stockings and closed-toe shoes. Scrubs (seafoam green for anatomic pathology) for procedures will be provided and laundered. The provided scrubs should not be worn outside of the hospital.

DIAGNOSTIC MEDICAL SONOGRAPHY (BEACHWOOD)

<i>Program Snapshot: Diagnostic Medical Sonography (Beachwood)</i>	
Program Director	Halley Majersky, MEd, R.T. (R)(M)(CT)(MR) majersh@ccf.org
Location	CCAC – Building 2 25900 Science Park Drive Beachwood, OH 44122
Clock Hours	2306
Program Length	84 weeks / 21 months
Delivery Method	Residential
Total Cost (tuition + fees)	\$15,750

Overview

The Diagnostic Medical Sonography (DMS) Program (Beachwood) is a full time, 21-month (5 semester) certificate-level program. Upon completion, a student will receive a certificate of completion which will allow them to take the Sonographic Principles and Instrumentation (SPI) examination along with a specialty area examination through the American Registry for Diagnostic Medical Sonography (ARDMS).

Mission Statement

To develop exceptional imaging professionals who meet the needs of the community and provide a foundation for lifelong learning.

Objectives

Goal 1: The student/graduate will be clinically competent.

Outcomes:

- Students will provide appropriate patient care.
- Students will demonstrate clinical competency appropriate to their level of experience.
- Students will perform exams safely.
- Students will produce quality diagnostic images.

Goal 2: The student/graduate will demonstrate professionalism.

Outcomes:

- Students will demonstrate an understanding of the importance of professionalism.
- Students will demonstrate professional behaviors.
- Students will participate in career/health fairs or community service activities.
- Students will demonstrate an understanding of patient confidentiality (HIPAA).

Goal 3: The student/graduate will demonstrate effective critical thinking.

Outcomes:

- Students will be able to modify routine procedures for non-routine patients.
- Students will effectively critique images to determine if corrective action is required.
- Students/graduates will acquire critical thinking skills and problem-solving abilities that

- enhance their clinical experience.

Goal 4: The student/graduate will demonstrate effective communication.

Outcomes:

- Student will demonstrate effective written communication.
- Student/graduate will demonstrate professional verbal communication in the health care environment.

Accreditation

State Approval

The Diagnostic Medical Sonography Program (Beachwood) is approved by the Ohio State Board of Career Colleges and Schools in accordance with Ohio Revised Code Chapter 3332 (School Registration No. 2165).

Ohio State Board of Career Colleges and Schools
30 E Broad St Suite 2481
Columbus, OH 43215
614-466-2752
Scr.ohio.gov

Faculty

Halley Majersky, MEd, R.T. (R)(M)(CT)(MR), Program Director (full-time)

Education: Certificate, Radiology, Trumbull Memorial Hospital School of RT
B.S., Computed Tomography, Kent State University
M.S., Adult Education, Cleveland State University

Phone: 216-212-0484

Email: majersh@ccf.org

Angela Perry, BSAS, RDMS, RVT, RMSKs, Program Manager (full-time)

Education: Certificate, Sonography, Sanford Brown Institute
B.S., Applied Science, Youngstown State University

Phone: 216-769-2452

Email: perrya@ccf.org

Amy Varcelli, BSAS, RDMS, RVT, RMSKs, Coordinator Sonography Education (full-time)

Education: A.S., Diagnostic Medical Sonography, Cuyahoga Community College
B.S., Applied Science, Youngstown State University

Phone: 216-769-2481

Email: varcela@ccf.org

Wendy Slaughter, BSVS, RVT, RDMS, Instructor Sonography Education (full-time)

Education: Certificate, Diagnostic Medical Sonography, Ultrasound Diagnostic School
B.S., Vascular Technology, Oregon Institute of Technology

Phone: 216-769-2482

Email: slaughw@ccf.org

Facilities

The program has sufficient current classroom and office space available to meet our needs. A classroom space is available to the students for additional study purposes, and the program has a sonography scanning lab equipped with several ultrasound units. In addition, the program has access to multifunctional devices, printers, and a Scantron grading machine.

The program's equipment and supplies are readily available to support the delivery of the program curriculum. The sonographic equipment is in good working order and is industry current. The records of all preventative maintenance and physicist reports are kept on hand and up to date.

Sufficient supplies are available to accommodate all enrolled students in class, lab and clinical. Each student is provided with a SonoSim learning system. The program provides adequate instructional equipment, laboratory supplies, and storage for student use and for teaching the didactic and supervised laboratory education components of the program. Students have access in each classroom to computers with internet and intranet. They are also able to access MyLearning and Trajecs on the computers.

Advisory Board

The Diagnostic Medical Sonography Program's (Beachwood) Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Angela Perry	BSAS, RDMS, RVT, RMSKs	Program Manager, Cleveland Clinic
Amy Varcelli	BSAS, RDMS, RVT, RMSKs	Clinical Coordinator, Cleveland Clinic
Wendy Slaughter	BSVS, RVT, RDMS	Faculty Staff, Cleveland Clinic
Larry Raber	RDMS, RVT-DMS	DMS- Clinical Manager, Cleveland Clinic
Mari Knettle	DPT, EdD, FASAHP	Dean, School of Health Professions, Cleveland Clinic
Mark Moore	RT(R)	Education Coordinator, Cleveland Clinic
Melissa Villanti	RDMS, RVT	DMS Lead Technologist, Cleveland Clinic
Amy Cottrell	RDMS, RVT, RMSKs	DMS Education Specialist, Cleveland Clinic
Bridget King	RDMS, RVT	DMS Clinical Manager, Cleveland Clinic
Tera Munaretto		Administrative Director, Hillcrest Hospital, Cleveland Clinic
Aleksandra Kimevski	RDMS, RVT- DMS	Clinical Manager, Hillcrest Hospital, Cleveland Clinic
Sara Hunter	BS, MD	Medical Advisor, Cleveland Clinic Imaging Institute, Cleveland Clinic
Genna Gabanic		Graduate Liaison
Halley Majersky	Med, RT(R)(M)(CT)(MR)	Program Director, Cleveland Clinic
Lisa Davis	RDMS	Lead Technologist OGI/MFM, Cleveland Clinic
Patrica Delzell	MD, FAIUM	Radiologist/Physician-President
Brent Gallagher	RDMS, RVT	Ultrasound Account Manager/Consultant GE

Frank Porcelli	RN	Chief Operating Officer/Operations Manager- OnSite Imaging
Leo Jeffres	PhD	Communications & Journalism Professor, CSU (retired)
Kayte Wager		Student Liaison (Cohort 2)

Technical Standards

1. Candidates must have good eyesight either naturally or through correction. They must be able to see the printed words in a Sonographic textbook and be able to read and accurately interpret the numbers on a Sonographic technique chart.
2. Candidates must have the ability to hear instructions and be able to respond to verbal requests by patients/customers.
3. Candidates must be able to lift a minimum of thirty (30) pounds and possess the ability to support up to 175 pounds. Sonographers must assist, support and move patients from wheelchairs and carts onto Sonographic examination tables which requires the use of their backs and muscles.
4. Sonographers work while standing, sometimes for hours. Candidates must be able to move around and stand for long periods of time.
5. Sonographers must verbally instruct patients and be able to express concern and empathy for them. Candidates must possess good verbal and nonverbal communications skills as evidenced from the application and interview process. Sonographers must perform data entry with dexterity and accuracy.
6. Candidates must be physically and mentally capable of fulfilling the objectives of the Diagnostic Medical Sonography Program (Beachwood). The school will make reasonable accommodations to assist a student with a disability to advance through the program. However, candidates must be aware that the school is located on the third floor of a building with no elevator. Candidates must have sensory function adequate for patient assessment and care. They must possess the physical status needed to provide all aspects of care in a safe manner.

Admissions Requirements

Applicants to the Diagnostic Medical Sonography Program (Beachwood) must meet the following requirements:

1. Possess a high school graduate or earned a certificate of equivalent education recognized by the U.S. Department of Education. If a student has completed high school in another country the student must submit an official translated transcript. Foreign transcripts must be evaluated by the National Association of Credential Evaluation Services (NACES).
2. Satisfied the following college-level coursework requirements:
 - a. All courses must be college credit courses with a "C" grade or higher while maintaining a minimum GPA of 2.5. These courses must be from a regionally accredited college and have a traditional letter grade. The Diagnostic Medical Sonography (Beachwood) Program does not accept the pass/no pass grading option.
 - b. Courses that need be completed:
 - Anatomy & Physiology I & II (To have been completed within the last 5 years)
 - Medical Terminology
 - College level algebra
 - Physics for Allied Sciences (or College physics)

Interpersonal Communications (or English equivalent)

3. Eight (8) hours of clinical observation must be completed within the first 8 weeks of the program.

Application Process

The Diagnostic Medical Sonography Program (Beachwood) uses a selective process to determine which students will be accepted into the program. Acceptance into the program is based on a point system that includes scores from a behavior-based interview, high school and college GPAs, and the number of additional science and math classes with a grade of "C" or better. The higher the grade on the science and math courses, the more points awarded.

The program accepts a maximum of 5 students each year based upon clinical site availability. Acceptance letters will be emailed approximately one month after the interview process has been completed. The Diagnostic Medical Sonography Program (Beachwood) starts each year in August.

All candidates must complete an application to the Diagnostic Medical Sonography Program (Beachwood) by meeting the following criteria:

1. Complete and submit an application through the Campus Café system form with payment of a non-refundable \$20.00 application fee.
2. Send official high school transcripts or GED and college transcripts to the program.
3. Candidates are encouraged to submit the previous documents by February 1st or until the program has sufficient applications that meet the requirements.
4. Candidates may be considered who meet most of the requirements if there is evidence that they will meet the requirements prior to the beginning of the program.
5. Candidates are required to provide proof of health insurance and current certification in Basic Life Support for Health Care Providers from the American Heart Association.
6. Candidates must pass a criminal background check. If a candidate does not pass the criminal background check, they will not be permitted to continue in the program.
7. Candidates accepted into the program must submit a \$300 non-refundable tuition deposit which is applied to the first semester tuition.
8. All qualified candidates must participate in a behavior-based interview by the members of the selection committee after completing the application process.
9. Candidates must provide a current e-mail address with their application. This is needed to contact you for clinical observation and for access to the program learning management system. No application will be processed without a valid and current email address.
10. Must complete the college credit course prerequisites. The program is not able to offer placement tests for the prerequisite courses.

Graduation Requirements

Students must meet the following requirements to graduate from the Diagnostic Medical Sonography Program (Beachwood):

- Satisfactory completion of all program courses.
- All competencies must be completed as outlined in the Competency Examination Policy.

- All required JRC-DMS mandatory & elective competencies must be completed.
- All required JRC-DMS general patient care procedures must be completed.
- All required Developmental Examinations and corrections must be completed.
- All regular and make-up hours must be completed.
- Tuition payment and fees must be paid in full.
- All reference books or other material must be returned, including any resources from the CC Library.
- ID badge must be returned. A fee will be charged for missing ID badge. All fees must be paid prior to graduation.
- Graduation survey must be completed.
- Employer release form must be signed.
- Satisfactorily complete a Capstone Project.
- Students must sit for the Sonography Principles & Instrumentation ARDMS Exam prior to graduation.

Grading Scale

The following grading scale is used by the program:

Scale	Grade	GPA	Definition
93-100%	A	4.0	Excellent
84-92%	B	3.0	Good
*75-83%	C	2.0	Satisfactory
67-74%	D	1.0	Unsatisfactory
0-66%	F	0.0	Inadequate/Fail

Students must maintain a "C" grade or better in each academic and clinical course in the Diagnostic Medical Sonography Program (Beachwood). Students not satisfying this minimal academic requirement will be dismissed from the program.

If a student does not complete all required course assignments by the end of the semester, they will receive an incomplete grade. Incompletes must be resolved within 5 weeks into the next semester, or the grades converts to an "F", or failing grade.

Students are counseled as needed throughout the semester regarding academic grades, clinical grades, attendance, tardiness, evaluations, semester GPA, cumulative GPA, and other pertinent information regarding student progress.

Clinical Grades

Students will be given an established number of points for each clinical experience. Each semester clinical grade will be determined by:

The number of evaluations turned in by the end of the semester. Four points will be deducted from the established number of clinical points for each missing evaluation.

Observance of program and department policies and practices.

- Four points off for each documented counseling.
- Six points off for each written corrective action.
- Ten points off for each final written corrective action/suspension.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Diagnostic Medical Sonography Program (Beachwood) will occur after the completion of the first, second, third, and fourth semesters of the program. This will ensure DMS students are meeting the 75% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

This policy establishes standards of appropriate attendance, provides a procedure for notification of absence and tardiness, and establishes guidelines for the discipline and improvement of substandard attendance and tardiness.

The ethics and attitudes developed through adherence to this policy will help ensure student success in the future, regardless of their place of employment. Excessive tardiness or absenteeism negatively affects patient care and hospital morale and is therefore unacceptable. Failure to comply with these policies will result in corrective action based on a point system, up to and including expulsion from the program. **Please note:** *records of attendance and corrective action are retained for a period of seven (7) years after graduation and are reviewable for matters pertaining to employment references, dismissal and reinstatement after dismissal.*

General Attendance and Timeliness

It is the responsibility of each student to be accountable to the faculty of the school and the clinical preceptors at each clinical site. Please use the following guide for informing the school faculty of any changes to your schedule. Depending on the circumstances, corrective action may result. Please see the Corrective Action Policy for more detail.

Call the Attendance Line:

- a. If a student is unable to attend class or clinical. Student must text all three program faculty no later than 7:00am.
- b. If a student is running late to class or clinical. Message must include an estimated time of arrival.
- c. If a student is told to leave clinical for lack of work. Requires documentation from clinical preceptor.
- d. Any PTO to be used in the morning must be requested **prior to midnight the night before**, or the student will be considered tardy.

Write in the Attendance Book: (after approval by a faculty member)

- a. If a student knows ahead of time, they will be using PTO for all or part of the day.
- b. If a student knows ahead of time, they will be absent from class or clinical.
- c. If there is any change to their schedule.

Call Faculty for Permission:

If a student unexpectedly needs to leave clinical early, they shall call a faculty member for permission.

Class and Lab Specific Attendance

Class days are 8:00 am – 4:30 pm. Regular and prompt attendance for Diagnostic Medical Sonography Program (Beachwood) courses and labs is essential for students to meet the educational challenges and to accomplish learning outcomes of the Diagnostic Medical Sonography Program (Beachwood). Due to the progressive nature of the individual courses and the program, attendance and punctuality are seen as essential qualities for a student's success. All classes and labs will begin as scheduled. Please allow for weather, traffic and other circumstances that may cause a delay. In the event of absence or tardy, please see **Points section**.

1. Students must clock in and out upon arrival and departure from clinical.
2. Students are expected to be in the classroom or lab prior to the official start time.
3. A student will be considered tardy if they are 1 minute late or greater.
4. If a student has more than two (2) unexcused absences from class, the student's grade will be affected.
5. If a student is absent for 50% or more of a scheduled class or lab session, they are considered absent for that class or lab session.
6. An extended lunch period is considered an incident of tardiness.
7. Severe weather or driving conditions, as deemed by the program director, may be considered an excused absence.

Clinical Education Specific Attendance

Clinical days are 8:00 am – 4:30 pm. Attendance and punctuality are seen as essential qualities for your chosen profession. Timeliness is essential at the clinical site as it can be a direct indicator of what type of employee you may become. It is the student's responsibility to inform the school **and** the clinical preceptor if they are running late, will be absent, or have scheduled time off. Clinical days are eight (8) hours in length, not including the lunch break. Please make time allowances for weather, traffic and other circumstances that may cause a delay. In the event of absence or tardy, please see **Points section**.

1. Students must clock in and out upon arrival and departure from clinical.
2. Students are expected to be in their assigned area and ready to work at their official start time.
3. If a student leaves the facility for lunch or any other reason, they are required to clock out and in.
4. Students are not to clock in more than 15 minutes before their scheduled start time at clinical.
5. A student will receive 0.5 point if:
 - a. They are one minute or more late.
 - b. They take an extended lunch period.
 - c. They leave before the end of their scheduled time.
6. A thirty (30) minute lunch break is required when a student is at the clinical site for more than five (5) hours (*some sites allow 45 minutes, must check with clinical site*).
7. If a student wishes to stay longer than eight (8) hours, they need to inform the program of their intentions and receive permission prior to doing so.
8. Students cannot attend clinical in excess of 10 hours per day.
9. Students may **not** exceed 40 hours in a week of clinical and class time (Monday-Friday).
10. Severe weather or driving conditions, as deemed by the program manager, may be considered an excused tardy.

Excused Absences

Bereavement and jury duty are considered excused absences from class or clinical and therefore do not count toward the absences that can cause a course letter grade to drop. Students are responsible for any missed assignments and must make arrangements with their instructor to make up exams and assignments within one week of returning to class. PTO is not needed for excused absences from clinical. If extended time off is needed from class or clinical, the student may request a Leave of Absence (LOA).

Please refer to the Leave of Absence Policy for more detail.

Personal Time off (PTO)

In addition to pre-scheduled program breaks and holidays, students are permitted 24 hours of PTO per semester. PTO accumulates and unused PTO will carry over into the next semester. PTO can only be taken in 30-minute increments. Students should reserve PTO for unforeseen personal or family illnesses or emergencies. All PTO requests must be approved by program faculty.

Any PTO to be used in the morning must be requested before midnight the night before, or the student will be considered tardy.

For planned absence, PTO must be requested and documented in the attendance book and the student must also notify the clinical preceptor or designee in advance. Students who wish to leave early, or leave and return to the clinical site, must get verbal permission from program officials by phone.

Interview Day: Students may take up to two (2) separate 3.5-hour blocks for a scheduled Cleveland Clinic sonography interview in the fifth semester. Documentation is required.

Earned Personal Time Off (EPTO)

Students may earn PTO by participating in extracurricular activities related to Diagnostic Medical Sonography and/or community service. All activities must be approved by program officials.

EPTO can be earned by participating in the following community service / professional activities:

- The DMS professional society meeting (1 hour / each educational session attended).
- Blood donation (2 hours/donation)
- Cleveland Heart Walk
- Greater Cleveland Food Bank

EPTO Maximums

A maximum of fourteen (14) hours per academic year is permitted to be earned.

Exceeding PTO

Exceeding PTO will result in a corrective action. Exceeded PTO will require make-up time at the end of the 5th semester. Make-up time begins the Monday after the end of the 5th semester from 8:00 am – 4:30 pm each day, until completed. If a student has less than two hours of total make up time, they may add that time to their final week of clinical with program permission

Scheduled Break Weeks

Students have twelve (12) scheduled break weeks over the length of the program as indicated by the academic calendar. Students who wish to take a vacation should utilize break weeks for

this purpose.

School Closure

Class and/or clinical may be canceled by the program director, or designee. Closure of the school as a result of inclement weather or other emergency will be communicated to the students via text or email. It is the student's responsibility to inform the program of email address or phone number changes.

Make-Up Time

Make-up time for approved LOA, tardiness or exceeding PTO must be completed after the end of the fifth semester. Make-up time will start the Monday after the end of the 5th semester from 8:00 am – 4:30 pm. All program policies will remain in effect until all make-up time is completed and all graduation requirements are met. Make up time can only be performed at primary clinical site. Make-up time less than two (2) hours might be able to be completed during the final week of the program with faculty permission

Students are not eligible to take the ARDMS (AB) or (OB) examinations until all graduation requirements have been met.

Students must adhere to the 8:00am – 4:30pm clinical rotation schedules and are only permitted to stay over in order to complete a procedure.

Points

Points for attendance violations are accumulated accordingly and remain for one (1) rolling year. A rolling year is defined as the 12-month period of active student participation immediately preceding the date of the chargeable occurrence. In the event of a leave of absence (LOA) of more than 21 days, the rolling year will be extended beyond 12 months by the amount of time approved on the LOA. The first two incidents of tardy or failure to swipe in/out are forgiven and will not result in points.

Failure to Clock In or Out

For each instance that a student forgets to clock in or out, they must provide time verification from a technologist . See chart below for points for failure to swipe in and out.

Tardy / Leaving Early .50
Failure to Clock in or Out . .25

Two occurrences of no clock in/out within day:

The student is required to provide documentation within one week of the occurrence or will be charged with eight (8) hours of make-up time **and** the incident will be considered a **NO CALL / NO SHOW** requiring a corrective action. Time verification is still required.

Corrective Action for Points

Corrective action for accumulation of points will be initiated according to the chart below. A corrective action will be initiated **each time** a student reaches a point level. Any corrective action (including points for attendance) may affect the student's clinical grade.

Corrective Action Full-Time

Documented Counseling: 4 points
Written Corrective Action: 8 points

Final Written Warning / Suspension: 10 points
Dismissal: 12 points

No Call/No Show

This applies when a student does not attend class and fails to report off to the school or when a student does not attend clinical and fails to report off to **both** the school and clinical. Notification received more than **two hours** after scheduled start time is a “NO CALL/NO SHOW.”

Tuition and Fees

Acceptance Fee: \$300.00 (Non-refundable)
(Applicable toward first semester tuition)

Semester Tuition: \$3,150.00 per semester

Total Program Tuition & Fees: \$15,750.00

Estimated Additional Expenses

Application Fee	\$20.00
Textbooks	\$1,100.00*
Uniforms	\$200.00
ARDMS SPI Exam Fee	\$250.00
ARDMS Specialty Fee	\$275.00- per specialty

* Estimated

Payments must be made on or before the due date. Tuition must be paid in full before a student can continue to the next semester unless they have received permission to do so from the program director. The tuition and fees are subject to change upon due notice to the student.

The Diagnostic Medical Sonography (Beachwood) Program has the right to deny access to grades, transcripts, letters of recommendation, actions on appeals or grievances, class, clinical experience, exams and ARDMS notification of completion, if a student fails to meet financial obligations for tuition and fees. Students who are delinquent on any payments while using the IPP agreement described below, will be denied future use of the plans.

Payment Options

1. Payment in full
2. Semester payments: Due before the start of the first day of classes.
3. If payment is received after due date, a \$25 late fee will be assessed for each overdue payment
4. Installment Payment Plan

Installment Payment Plan (IPP)

The program offers an Installment Payment Plan (IPP) for students who desire this option. The plan allows the student to pay the semester tuition and fees in monthly payments beginning on the tuition due date. The cost of this service is \$25.00. There will be no other fee or interest charges for the service unless the student fails to meet payment deadlines. If a student fails to meet a pre-arranged payment due date, a \$25 monthly charge will be assessed to each overdue payment.

Academic Calendar

Date	Calendar Description
August 19, 2024	Fall Semester Begins
September 2, 2024	Labor Day – No Class or Clinical
September 17, 2024	Constitution Day – Classes/Clinicals in Session
October 14-18, 2024	Fall Break – No Class or Clinical
November 28-29, 2024	Thanksgiving Break - No Class or Clinical
December 8-13, 2024	Final Exam Week
December 16, 2024 – January 3, 2025	Semester Break - No Class or Clinical
January 6, 2025	Spring Semester Begins
March 3-7, 2025	Spring Break - No Class or Clinical
April 28 – May 2, 2025	Final Exam Week
May 2, 2025	Graduation
May 5-16, 2025	Semester Break – No Class or Clinical
May 19, 2025	Summer Semester Begins
May 26, 2025	Memorial Day - No Class or Clinical
July 4, 2025	Independence Day Holiday – No Class or Clinical
August 4-8, 2025	Final Exam Week
August 11-22, 2025	Semester Break - No Class or Clinical
Monday, August 25, 2025	Fall Semester Begins

Curriculum Outline

Fall Term		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DMS101	Introduction to Sonography & Patient Care	32	0	0	32
DMS111	Diagnostic Medical Sonography-Abdomen I	72	0	0	72
DMSL111	Introduction to Sonography Scan Lab	0	64	0	64
DPHY100	Ultrasound Physics & Instrumentation	64	0	0	64
TOTAL TERM					232
Spring Term		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DMS112	Diagnostic Medical Sonography-Abdomen II	64	0	0	64
DMSL112	Sonography Scanning Lab II	0	48	0	48

DMS102	DMS- Gynecology & 1 st Trimester	72	0	0	72
DMSL102	Sonography Scanning Lab III	0	48	0	48
DCL102	Clinical Experience I	0	0	304	304
TOTAL TERM					536

Summer Term		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DMS103	DMS- 2 nd & 3 rd Trimester Obstetrics	54	0	0	54
DMSL103	Sonography Scanning Lab IV	0	36	0	36
ETH101	Healthcare Ethics and Law	24	0	0	24
DMS200	Registry Review- SPI	24	0	0	24
DCL103	Clinical Experience II	0	0	288	288
TOTAL TERM					426

Fall Term		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DMS223	DMS- Introduction to Vascular	16	0	0	16
DMSL223	Sonography Scanning Lab V	0	24	0	24
DCL201	Clinical Experience III	0	0	512	512
TOTAL TERM					552

Spring Term		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DMS226	Registry Review- Abdomen	16	0	0	16
DMS227	Registry Review- Ob/Gyn	16	0	0	16
DMS230	Capstone	16	0	0	16
DCL202	Clinical Experience IV	0	0	512	512
TOTAL TERM					560

TOTAL CLOCK HOURS: 2,306

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9780323826464	Textbook of Diagnostic Sonography	Sandra L. Hagen-Ansert	9th	2022	Elsevier
9780323826501	Workbook for Textbook of Diagnostic Sonography	Sandra L. Hagen-Ansert	9th	2023	Elsevier
9780323597388	Sonography Scanning: Principles & Protocols	M. Robert de Jong	5th	2020	Elsevier
9780962644450	Understanding Ultrasound Physics	Sidney K. Edelman	4th	2012	ESP Ultrasound
9781975120108	Introduction to Sonography and Patient Care	Steven M. Penny	2nd	2020	Wolters Kluwer
780323827508	Legal & Ethical Issues for Health Professionals	Jaime Nguyen	5th	2019	Elsevier

9780323582285	Sonography Exam Review: Physics, Abdomen, Obstetrics and Gynecology	Susanna Ovel	3rd	2019	Mosby/Elsevier
9781702335270	Ultrasound Physics Made Easy	Paul Mushinsky		2019	Amazon

Professional Appearance

Uniforms consist of either navy blue uniform tops (scrub) and white pants (scrub) or white uniform tops (scrub) and navy-blue pants (scrub). Warm-up jackets may be included but must be the same color as the uniform tops. Sweaters and sweatshirts are not permitted unless in the classroom.

1. Shirts (tanks, t-shirts, turtlenecks) both long or short sleeved may be worn under the uniform but must be solid white. If wearing a long sleeve white shirt, the shirt may not extend beyond the wrist and may not have thumbholes. No decals, designs or words are permitted on the undershirts. Crew-neck shirts are highly recommended under V-neck uniform tops. If a short sleeve t-shirt is worn underneath a short-sleeve uniform top, the sleeves of the t-shirt must not hang below the uniform top sleeves. $\frac{3}{4}$ sleeve length tops are not permitted.
2. **In class dress code:** Same as above but students are permitted to wear SODI, Radiology, and Cleveland Clinic logo fleece or sweatshirts only over the uniform. All shirts and jackets must have the school patch sewn on the left sleeve, two finger widths down from the top of the left shoulder seam.
3. Socks/hosiery must be solid white.
4. Undergarments should not be visible beneath the uniform.
5. Uniforms must be freshly laundered and wrinkle-free each time they are worn.
6. Shoes must be either solid white or solid navy blue. They must not have colored stitching, stripes, insignias, etc. and must always be kept clean.
7. The Cleveland Clinic ID badge must be worn at all times, with the name and photo visible, at the chest or collar level.
8. Hospital provided scrubs may only be worn in surgery and must be returned before leaving the clinical site.

Surgical Scrub Policy

This policy has been implemented throughout the Cleveland Clinic Health System in accordance with *Nursing Institute Policy 213* to encourage hygiene, ensure OSHA compliance, promote compliance with infection control and preserve our public image. This policy applies to all operating and procedure rooms.

- Surgical scrubs cannot be worn outside of the hospital/facility or to and from work.
- Students must change into surgical scrubs once they enter their surgical locations and change again before leaving the hospital.
- When leaving the surgical or procedure rooms, surgical scrubs must be covered with a buttoned lab coat or warm-up jacket while inside the hospital – for example, during a lunch break in the cafeteria or running an errand outside the surgical department.
- Disposable hats, masks, gowns, gloves and shoe coverings must be removed when leaving surgical departments. Discard these items prior to leaving the surgical department or procedure room.

Classroom Dress Code for Approved Dress Down Days

Students should refer to the Dress/Professional Appearance.

DIAGNOSTIC MEDICAL SONOGRAPHY (MERCY)

<i>Program Snapshot: Diagnostic Medical Sonography (Mercy)</i>	
Program Director	Susan Bielanski, BS, RDMS BielanS2@ccf.org
Location	Mercy Hospital 1320 Mercy Drive NW Canton, Ohio 44708 330.489.1000, ext. 6609
Clock Hours	1920
Program Length	52 weeks / 12 months
Delivery Method	Residential
Total Cost (tuition + fees)	\$14,000

Overview

The Diagnostic Medical Sonography (DMS) Program (Mercy) is a 12-month, full-time program consisting of up to forty (40) hours per week. This includes both classroom and clinical experience. Upon completion of the program, graduates are eligible to apply for the American Registry for Diagnostic Medical Sonography (ARDMS) abdomen and obstetrician-gynecological examinations.

Mission Statement

To cultivate lifelong learners who will continue to grow and meet the needs of their community as exceptional sonographers with a student-centered approach to clinical and didactic education.

Objectives

1. Prepare competent entry-level abdominal, obstetric and gynecologic sonographers in cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains.
2. Upon graduation the student shall be able to:
 - Obtain, review, and integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results;
 - Perform appropriate procedures and record anatomic, pathologic, and/or physiologic data for interpretation by a physician;
 - Record, analyze, and process diagnostic data and other pertinent observations made during the procedure for presentation to the interpreting physician;
 - Exercise discretion and judgment in the performance of sonographic and/or other diagnostic services;
 - Demonstrate appropriate communication skills with patients and colleagues;
 - Act in a professional and ethical manner;
 - Facilitate communication and education to elicit patient cooperation and understanding of expectations, and responds to questions regarding sonographic examination.

Accreditation

Institutional Accreditation

Cleveland Clinic is accredited by:

The Joint Commission
One Renaissance Blvd.
Oakbrook Terrace, IL 60181
Phone: 630-792-5000
www.jointcommission.org

Programmatic Sponsorship

The Diagnostic Medical Sonography Program (Mercy) is sponsored by:
Cleveland Clinic
9500 Euclid Ave.
Cleveland, OH 44195

Programmatic Accreditation

The Diagnostic Medical Sonography Program (Mercy) is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 113th Street N., #7709
Seminole, FL, 33775-7709
(727) 210 - 2350

Department Accreditation

The Cleveland Clinic Ultrasound Department is accredited by:

ACR
1891 Preston White Drive
Reston, VA 20191-4397
Phone: 703-648-8900
Fax: 727-210-2354
mail@caahep.org
www.acr.org

Faculty

Susan Bielanski, BS, RDMS, Program Director (full-time)

Education:	A.A.S., Sonography, Owens Community College B.S., Diagnostic Medical Sonography, Florida Hospital College of Health Sciences		
Phone:	330-489-1000 ext. 6609	Email:	bielans2@ccf.org

Lori Brown, RDMS, Clinical Coordinator

Education: Certificate, Diagnostic Medical Sonography, Aultman Hospital – School of Diagnostic Medical Sonography
A.A.S., Radiologic Technology, Akron University

Phone: 330-489-1000 ext. 6609

Email:

<mailto:brownl31@ccf.org>

Facilities

All instructional facilities for the Diagnostic Medical Sonography Program (Mercy) are on the campus of Cleveland Clinic Mercy Hospital. The ultrasound classroom, MCY1-435, is used for most classes and other conference rooms are located throughout the hospital and may be used occasionally as classroom space.

The Diagnostic Medical Sonography (Mercy) Program uses the facilities of the Ultrasound Department at Cleveland Clinic Mercy Hospital for educational purposes. The Department equipment consists of Acuson Sequoia units. Quality Assurance is performed on all equipment on a regular basis by staff, service technicians and the medical physicist. A Siemens S2000 is available in the ultrasound classroom on weekdays, during school hours.

General Ultrasound rooms in the department are used by students and faculty to conduct experiments and to practice ultrasound procedures. The students are provided with scan lab experience for most exams before they attempt them in the Ultrasound Department on patients.

The Program Director's office is located within the Ultrasound Department. Other faculty not having private offices can use the Program Director's office for their own planning, research, counseling, etc. as needed.

Advisory Board

The Diagnostic Medical Sonography Program's (Mercy) Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Barry McNutty	M.D., F.A.C.R.	Medical Advisor
Susan Bielanski	BS, RDMS	Program Director, Cleveland Clinic
Lori Brown	RDMS	Clinical Coordinator, Cleveland Clinic
Jeffrey McCune	RT(R) BSRS	Administrative Director, Radiology services or representative, Cleveland Clinic
David McAninch	RDMS	Staff Sonographer, Cleveland Clinic

Danielle Bernard	RDMS	Graduate of the Program
Emily Dobbins		Student Liaison
Bruce Campbell	Ph.D.	Public Member
Lisa Kulhanek	RDMS	In-Field Specialist

Technical Standards

Skills:

- Organizational
- Verbal
- Interpersonal
- Customer Relations
- Mathematical
- Analytical
- Read/Comprehend written instructions
- Ability to receive and respond to instructions in clinical settings

Mental and Emotional Requirements:

- Manage stress appropriately
- Make decisions under pressure
- Handle multiple priorities
- Work in areas that are confined and/or crowded

Physical Requirements:

MEDIUM WORK: Exert up to 50-lbs. force occasionally, and/or up to 20 lbs. frequently, and/or up to 10 lbs. constantly

- Ability to perform work in a stationary position for extended periods
- Ability to travel through the hospital system
- Ability to perform repetitive tasks/motions
- Ability to distinguish colors
- Ability to detect anatomy and pathology on the ultrasound screen
- Ability to respond to alarms, telephone, normal speaking voice
- Ability to operate sonography equipment

Admissions Requirements

The following shall be used for determining the acceptability of a candidate for admission to the program:

Applicant must be a graduate of a 2-year AMA Allied health education program that is patient care related
OR a 4-year bachelor's degree with:

1. GPA of at least 2.5
2. Current BLS certification
3. Satisfactory completion of the following prerequisites:
 - General Physics
 - Communication Skills
 - Medical Terminology

- Human Disease
- Algebra 101, or higher-level college Math
- Human Anatomy and Physiology I
- Human Anatomy and Physiology II (or Human Structure & Function or Human Biology)

Meeting application requirements does not guarantee admission into the program.

Application Process

The following materials must be received by the program before an application can be considered:

1. Completed application through Campus Café system
2. Transcripts from colleges attended
3. Two completed recommendation forms
4. \$20.00 non-refundable application fee
5. BLS certification
6. Degree or certificate of graduation from a 2-year Allied Health Education program **OR** 4-year bachelor's degree

Completed applications must be submitted by April 1 along with the \$20.00 application fee. One class of students will be admitted in July of each year.

Interview and Acceptance Procedure

All applicants interviewed for admission will be informed of the Committee's decision to accept or deny admission.

Interview scores are based on two portions.

- Application score (based on courses taken, grades, degree and healthcare experience)
- Panel Interview (based on average score of panel members on a set of pre-determined questions, which are the same for all applicants, asked in the same order for all applicants)

All applicants not meeting requirements shall be notified by email.

Final class selection will be made by approximately April 30th of each year.

Graduation Requirements

In order to be eligible for graduation, the student must:

- Satisfactorily complete all clinical requirements
- Satisfactorily complete all didactic courses
- Maintain a satisfactory GPA clinically and didactically
- Complete 12 months of clinical and didactic education
- Complete all make up time over 40 hours
- Have all costs to the program paid in full

Grading Scale

Grades are computed on a quarterly basis for each course based upon the following grading system:

Scale	Grade	GPA	Definition
93-100%	A	4.0	Excellent
84-92%	B	3.0	Good
75-83%	C	2.0	Satisfactory
67-74%	D	1.0	Unsatisfactory
0-66%	F	0.0	Inadequate/Fail

Clinical Grading Scale

The student is expected to complete the required competencies and lab assessments by the end of the clinical quarter. Satisfactory levels of clinical performance must be maintained throughout the four (4) quarters to remain in good standing.

Clinical grade is computed as an average of all pass and failed clinical competencies and lab assessments +/- any merits or demerits for that quarter.

The clinical grade is based on the merit/demerit system (policy #7.6). the clinical grading scale is as follows:

Clinical performance is reviewed quarterly. Any student performing below minimum standards shall be placed on probation.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Diagnostic Medical Sonography Program (Mercy) will occur after the completion of the first, second, and third quarters of the program. This will ensure Diagnostic Medical Sonography students are meeting the 75% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

When reporting an absence, the student must notify program personnel by calling **330-580-4740**. The student may also call or text the program director.

An absence of three (3) consecutive scheduled days without notification shall be considered voluntary termination.

Absence and tardiness shall be classified under three (3) categories: Excused, unexcused and excused with permission.

Excused

An absence that is due to a valid reason satisfactory to the Program Director

Example: Illness, jury duty, physician appointments, and military leave.

Unexcused:

An absence that is not due to a valid reason satisfactory to the Program Director.

Example: Sleeping in, suspensions.

Excused with Permission

Absences arranged in advance with Program Director. These absences will not be counted toward the student's available sick time.

Examples: Funeral leave and attendance at professional meetings.

Suspensions:

Any student suspended for either clinical infractions or academic infractions. It is a standard three day suspension. These three days must be extracted from the student's vacation time and are more severe than a normal absence.

Excessive Absences and Tardiness

Excessive absence and/or tardiness are grounds for disciplinary action. Excessive absence is defined as three (3) or more incidents within 30 days or five (5) or more incidents within 180 days. Consecutive days missed for the same illness constitute one (1) incident.

If the student exceeds the allowable number of incidents within the time period, they will be referred to progressive corrective action. Please see policy # 7.61.

Number of Incidents	Reason
½	Forgot Badge/ Forgot to clock in or out
½	Tardy
½	Home early after working at least 4 hours of shift
½	Not clocking in or out
1	Home early without working at least 4 hours of shift
1	Late without working at least 4 hours of shift
1	Call-off within procedure guidelines
1 ½	Late call-off not within procedure guidelines
2	Failure to call-off or appear for shift

Make-up Work

All scheduled classes must be attended.

It is the student's responsibility to arrange for make-up of any classes or exams missed due to illness. Any exams not made up within two days of the student's return will be automatic "Fs. Arrangements may be made with the Program Director.

Classes missed due to unexcused absences cannot be made up.

The student must make up all hours exceeding 40 hours sick time during their training. If the student wishes to make up the time prior to graduation, they may volunteer for extra hours on day or evening shifts. The program director must approve all make up times and dates prior to the student completing it.

Student will NOT be allowed to attempt competencies during make up time after 3:30pm on weekdays or on weekends because the clinical instructor and program director are not available for supervision or review of the competency.

The following provision is made for extended illness not habitual absenteeism:

An absence of thirty (30) days or more during the twelve (12) month training period will disqualify the student from graduating with the class. The student will be asked to complete an amount of time equivalent to the time missed in excess of the 40 hours sick time before the Program Director will sign for the registry application.

Personal and Sick Time

The student is allotted 5 days (40 hours) of personal time during the education period of 12 months.

- This time can be used for illness, personal appointments, doctor visits, etc.
- Any time used that is beyond the allotted 40 hours will be made up at the student's convenience.

Suspensions:

Any student suspended for either clinical infractions, academic infractions or both is a standard three-day suspension. These three days must be extracted from the student's vacation time.

Return to Program

The student must obtain a doctor's excuse to return to school after five (5) consecutive days of illness. The note must certify fitness to return to clinical rotation or request reasonable accommodations.

If the physician has indicated that the student must be on light duty, then the student will be excused from tasks that are beyond their physical capability to the extent possible without altering the fundamental nature of the program.

NOTE: The Program Director reserves the right to request a physician's note from a student after two (2) consecutive days of illness.

Time Cards

EARLY CLOCK IN

Students may clock in prior to their scheduled start time however, they will not accrue overtime. Time cards will be edited to reflect the scheduled start time. Also, they are not permitted to perform exams prior to their scheduled start time.

EARLY CLOCKING OUT

Clocking out early without prior approval is considered grounds for progressive corrective action.

RECORDING OVERTIME

All overtime recorded will be evaluated by a faculty member.

Vacations

Students are given two (2) weeks' vacation during the one-year Program scheduled one week at a time

by the Program Director. The distribution will be as follows:

- Five days during December
- Five days for Spring Break

*Vacations may not be used to achieve early graduation.

*Vacations may be used to make up previous sick time used.

* Scheduling of vacation is at the discretion of the scheduler.

Tuition and Fees

Application Fee	\$20.00
Total Tuition	\$14,000.00*

Other costs associated with the program are estimated but not limited to the following:

Book Fee (estimate)	\$900.00
Uniform and Shoes	\$200.00
ARDMS SPI Exam Fee	\$250.00
ARDMS Specialty Fee	\$550.00- (\$275 per specialty)

**The program reserves the right to change tuition.*

Sonography Program Tuition:	\$14,000.00
Tuition due upon acceptance (non-refundable) =	\$300.00
Remaining Tuition=	\$13,700.00

The student is responsible for payment of the remainder tuition by the following dates to remain in the sonography program:

Remainder of 1st quarter tuition, \$3,200.00- Due July 10th.
 2nd quarter tuition, \$3,500.00- Due October 10th.
 3rd quarter tuition, \$3,500.00- Due January 10th.
 4th quarter tuition, \$3,500.00- Due April 10th.

Academic Calendar

Date	Calendar Description
July 8th, 2024	First Term Begins
August 1, 2024	Last Day to Receive 75% Tuition Refund
August 18, 2024	Last Day to Receive 50% Tuition Refund
September 2, 2024	Labor Day – No Class or Clinical
September 12, 2024	Last Day to Receive 25% Tuition Refund
September 17, 2024	Constitution Day – Classes/Clinicals in Session
November 28-29, 2024	Thanksgiving Break -- No Class or Clinical
December 20, 2024	End of First Term

December 23, 2024 – January 1, 2025

Semester Break - No Class or Clinical

January 2, 2025

January 27, 2025

February 12, 2025

March 9, 2025

March 24-27, 2025

May 26, 2025

June 18, 2025

Jun 19, 2025

Second Term Begins

Last Day to Receive 75% Tuition Refund

Last Day to Receive 50% Tuition Refund

Last Day to Receive 25% Tuition Refund

Spring Break - No Class or Clinical

Memorial Day – No Class or Clinical

Last Day of Classes

Graduation

Curriculum Outline

First Quarter		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DMS101	Introduction to Ultrasound	22	0	0	22
DMS102	Abdomen	58	0	0	58
DMS103	Sectional Anatomy	57.5	0	0	57.5
DMS102L	Lab 1	0	32	0	32
DMS104	Clinical Externship	0	0	310.5	310.5
TOTAL TERM					480

Second Quarter		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DMS105	Gyn/OB	28.5	0	0	28.5
DMS106	Obstetric 2/3	72.5	0	0	72.5
DMS105L	Lab 2	0	24	0	24
DMS107	Clinical Externship II	0	0	355	355
TOTAL TERM					480

Third Quarter		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DMS108	Superficial Structures	37	0	0	37
DMS109	Ultrasound Physics	75	0	0	75
DMS108L	Lab 3	0	12	0	12
DMS112	Registry Review (Physics)	26	0	0	26
DMS110	Clinical Externship III	0	0	330	330
TOTAL TERM					480

Fourth Quarter		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DMS111	Pediatrics and Miscellaneous	50.5	0	0	50.5
DMSL112	Registry Review (Abd & OB/Gyn)	72	0	0	72
DMS111L	Lab 4	0	10	0	10
DMS113	Clinical Experience IV	0	0	347.5	347.5
TOTAL TERM					480

TOTAL CLOCK HOURS: 1920

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9780323877954	Diagnostic Ultrasound, 2-Volume Set	Carol M. Rumack MD FACR	6th	2017	Elsevier
9780323661355	Sonography: Introduction to Normal Structure and Function	Reva Arnez Curry Reva Curry PhD RDMS RTR FSDMS and Betty Bates Tempkin BA RT(R) RDMS	5th	2021	Saunders
9781260441352	Lange Review Ultrasonography Examination	Charles Odwin, Arthur Fleischer	5th	2021	McGraw Hill
9781416050131	The Sectional Anatomy Learning System: Concepts and Applications 2-Volume Set	Edith Applegate MS	3rd	2009	Saunders
9780962644450	Understanding Ultrasound Physics	Sydney K. Edelman	4th	2012	E.S.P. INC.

Professional Appearance

Students not complying with the dress code will be sent home to change. Sick time hours will be used for this purpose.

Uniforms

Uniform scrub pants must be navy in color. Scrub tops and lab coats must be white with no designs. Under garments should be chosen so as not to be obvious under the scrubs. Jeans or sweatpants are not permitted.

Skirts must be knee length or longer.

Opaque white or navy hose will be worn with skirt. Socks over hose are not permitted.

Shoes

Must be white, black, dark blue or gray hospital shoes or tennis shoes. Small bits of color are acceptable.

Bright colored shoes are not permitted.

DIETETIC INTERNSHIP

<i>Program Snapshot: Dietetic Internship</i>	
Program Director	Elizabeth Friedel, MS, RD, LD, CNSC friedee@ccf.org
Location	Main Campus Building M-17 9500 Euclid Avenue Cleveland, OH 44195
Clock Hours	1344
Program Length	40 weeks / 10 months
Delivery Method	Residential
Total Cost (tuition + fees)	\$10,000

Overview

The Dietetic Internship Program is a full time, 10-month internship that provides training in the areas of clinical nutrition, food service management, sales & marketing, research, and public health/community nutrition. The experience provides a unique and broad spectrum of opportunities to fulfill the core competencies for dietetic interns, as established by the Accreditation Council for Education in Nutrition and Dietetics (ACEND). Interns who fulfill all program requirements, including a confirming graduate degree, will receive a certificate of completion and will be eligible to take the National Examination for Registered Dietitians.

Mission Statement

The mission of the Dietetic Internship Program is to create entry-level registered dietitian nutritionists who will become future leaders in the nutrition profession. Critical thinking, collaboration and decision-making are skills that the interns will be required to practice and refine throughout the program. The intention of our program is to create cutting-edge, advanced practice dietitians who will meet the needs of their clients and provide the best care through innovative skills and research-based practice.

Objectives

The program will foster internship graduates' professional growth and provide opportunities to acquire and demonstrate skills to become future leaders of the dietetics profession.

1. At least 80% of program students complete program requirements within a 15-month time frame (150% of the program length).
2. At least 90% of program graduates take the CDR credentialing exam within 12 months of program completion.
3. The program's one-year pass rate (graduates who pass the registration exam within one year of first attempt) on the CDR credentialing exam for dietitian nutritionists is at least 80%.
4. Of graduates who seek employment, at least 90% are employed in dietetics or related fields within 12 months of graduation.
5. 100% of graduates' employers report that knowledge level and skill competency is satisfactory or better overall for entry-level dietetics-related work.

6. 100% of graduates self-report overall scores of at least satisfactory regarding internship preparedness in dietetic-related professional skills and competencies.
7. 90% of graduates report leadership responsibilities in professional areas within five years of graduation.

Accreditation

The Dietetic Internship Program is fully accredited through June 30th, 2026, by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), a specialized accrediting body recognized by the United States Department of Education. Recognition by USDE affirms that ACEND meets national standards and is a reliable authority on the quality of nutrition/dietetics education programs.

ACEND may be contacted at:

The Academy of Nutrition and Dietetics

Accreditation Council for Education in Nutrition and Dietetics
Suite 2000
120 South Riverside Plaza
Chicago, IL 60606-6995
312.899.0040, ext 5400
<https://www.eatrightpro.org/acend>

Faculty

Elizabeth Friedel, MS, RD, LD, CNSC, Program Director, (full-time)

Education: Dietetic Internship, Cleveland Clinic Foundation
B.S., Dietetics, Ohio University
M.S., Food and Nutrition Sciences, Ohio University

Phone: 216-389-8749 (cell) Email: friedee@ccf.org
216-444-0961 (office)

Facilities

The students spend the majority of their time at their clinical site locations while enrolled in this program. While on Main Campus, interns have access to a dedicated office space that includes computers, printers, space to lock personal belongings, and a refrigerator. The program does not require laboratory space, although classroom space is available to the students for additional study purposes.

Advisory Board

The Dietetic Internship Program's Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Elizabeth Friedel	MS, RD, LD, CNSC	Program Director, Cleveland Clinic
Naomi Barbor	MS, RD, LD	Manager, Clinical Nutrition, Cleveland Clinic
Renee Welsh	MS, RD, LD, CNSC	Senior Director (Center for Human Nutrition), Cleveland Clinic
Lauren Sullivan	MSAN, RDN, LD	Hiring Manager, Cleveland Clinic
Mari Knettle	DPT, EdD, FASAHP	Dean, School of Health Professions, Cleveland Clinic
Christina DeTallo	MS, MBA, RD, CSP, LD	Director, CC Pediatric Nutrition, Cleveland Clinic
Arlene Escuro	MS, RD, LD, CNSC, FAND, FASPEN	Experienced Preceptor, DDCI, Cleveland Clinic
Denise Jezerski	RD, LD, CNSC	Program Graduate CCDI
Megan Maisano	MS, RDN, LD	Community Stakeholder

Technical Standards

There are certain physical requirements that must be met by dietetic interns to participate in and complete the program. Dietetic interns must have the ability to perform work in a stationary position and move throughout the hospital system for extended periods. In addition, all dietetic interns must possess the integrity, intelligence, and personal and emotional characteristics to become an effective healthcare professional. Additional physical requirements are as follows:

Sensory and Motor Skills

Interns and candidates for admission should be able to:

- Move items up to 10 pounds (primarily during foodservice rotation)
- Demonstrate basic clinical skills related to the use of stethoscopes and a pen light; physically conduct abdominal exams and a Nutrition-Focused Physical Exam (NFPE) which requires a stationary position at the bedside and adjusting patients to examine areas of muscle and fat loss.

Communication

Interns and candidates for admission should be able to:

- Possess excellent verbal and written communication skills in the English language.
- Converse clearly and exchange information accurately.
- Produce and transmit patient information in oral and written format to members of the healthcare team.
- Communicate with patients effectively, demonstrating compassion and empathy.
- Possess demonstrated reading skills at a grade level sufficient to accomplish curricular requirements
- Provide effective care to patients

Intellectual

Students and candidates for program admission should be able to:

- Measure, calculate, interpret, analyze, question, compile and evaluate information from various modalities to effectively assess patients and treat with nutrition therapy.
- Comprehend relationships between patient care parameters and anticipate cause and effect responses based on their actions and inactions.
- Learn through a variety of teaching modalities, including classroom lecture, small group activities, simulation exercises, individual and group presentations, and the use of technology- assisted learning.
- Utilize problem solving, decision-making and critical thinking skills daily.

Behavioral and Social Attributes

Interns and candidates for admission should be able to:

- Demonstrate emotional stability and maturity
- Exercise good judgment, prompt completion of all responsibilities related to the care of patients and participation on a healthcare team.
- Develop mature and effective relationships with peers, colleagues, supervisor, and patients.
- Perform problem solving skills in a timely manner.
- Function effectively under stress
- Adapt to changing environments, display flexibility, and learn to function in an environment of uncertainty inherent to the clinical setting.
- Practice in a safe manner
- Treat all patients, colleagues, peers, families, and other members of the healthcare team with dignity and respect.
- Demonstrate honesty, integrity, dedication, compassion, and motivation.
- Accept constructive criticism and respond appropriately with modification of behaviors.

Observation

Interns and candidates for admission should be able to:

- Discern information presented in images from paper, video, and PowerPoint slides.
- Observe simulation, lecture, and clinical demonstrations.
- Observe patients, preceptors, and members of the healthcare team accurately, both at a distance and close.

Admissions Requirements

To be considered for acceptance into Dietetic Internship Program, candidates must complete a graduate degree prior to starting the internship OR be enrolled with a graduation date planned no later than the summer of the same year completing the internship. (For example, if applying in the Spring 2025 match, degree should be completed by Summer 2026.)

Candidate must:

1. Complete all required coursework accredited or approved by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics.
2. Present a Verification Statement or Declaration of Intent.

*Effective January 1, 2024, the Commission on Dietetic Registration (CDR) will require a minimum of a master's degree to be eligible to take the credentialing exam to become a registered dietitian nutritionist

(RDN). For more information about this requirement visit CDR's website: <https://www.cdrnet.org/graduatedegree>.

In addition, CDR requires that individuals complete coursework and supervised practice in program(s) accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND). Graduates who successfully complete the ACEND-accredited Dietetic Internship program at Cleveland Clinic, and obtain a master's degree, are eligible to apply to take the CDR credentialing exam to become an RDN.

- In most states, graduates also must obtain licensure or certification to practice. [For more information about state licensure requirements click here.](#)
- [For more information about educational pathways to become a RDN click here.](#)

To be considered, the minimum overall grade point average should be at least 3.0 (on a 4.0 scale). The Dietetic Internship Program is committed to recruiting and supporting a diverse team of future nutrition professionals. We provide equal opportunity to all applicants for admission into the program. Decisions concerning selection are all made upon the basis of the best qualified candidate without regard to race, color, religion, gender, sexual orientation, gender identity, gender expression, pregnancy, marital status, age, national origin, disability, military status, citizenship, genetic information or any other factor or characteristic protected by federal, state or local law. Visit our Office of Educational Equity for more information.

Background Check Requirement

Accepted interns must pass a criminal background check during onboarding. Student records will be evaluated by Cleveland Clinic Protective Services inspectors and the Dean of the School of Health Professions to determine program eligibility. If an intern does not pass the criminal background check, they will not be allowed to continue in the program. If proof of a negative background check is necessary for an external rotation, interns may request a copy of their background check from Protective Services. This request must come from the intern and cannot come from the Internship Director. If additional background testing is required (i.e., fingerprinting) for an external rotation, the intern will be responsible for the fees associated with this testing.

Application Process

The Dietetic Internship Program participates in the online Dietetic Internship Centralized Application Services process (DICAS).

Candidates must complete all application materials in the DICAS platform. All materials are due by January 15th. All complete applications receive a full review. Applicants will be notified of acceptance on or before March 1st. Application confirmation to accept or decline program invitation offers will be requested on March 15th.

In addition to the standard application, we also request a video clip submission; 1-2 minutes long, where applicants can introduce themselves and share why they are interested in being a Cleveland Clinic dietetic intern. It is not required but strongly encouraged. This clip needs to be web-based and can be posted on YouTube or Vimeo. Please provide the video link and password, if necessary, at the bottom of your Personal Statement.

Selection Criteria

The selection of interns will be based upon the following criteria:

- Knowledge: Overall and professional coursework; GPA's (overall, science, DPD course-specific); college achievement scholarships, awards, and honors.
- Work Experience: Paid or voluntary work experience. Nutrition-relevant opportunities and those of high quality and/or with responsibility are recognized.

- Leadership and Self-Motivation: Positions of leadership in extracurricular activities or work experiences; ability to set goals, take initiative, make decisions, use good judgment, and work independently. Previous and future goals are realistic and clearly identified.
- Management of Multiple Responsibilities: Coursework taken per semester/quarter in conjunction with work experience or family responsibilities; involvement with extracurricular activities; organizational skills, dependability, adaptability, and ability to handle stress.
- Communication Skills: Personal statement and video submissions; experience communicating with groups and individuals; empathy; self-confidence; interview (if selected).

International Students

International students wishing to apply must follow procedures set forth by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) for international students. Please refer to the [ACEND website](#), and their "International Fact Sheet" for additional information.

Graduation Requirements

Once accepted into the program, all learning experiences specified in the program curriculum must be completed at a level of sufficient competency. Interns will receive frequent evaluations and feedback from supervising faculty and the Program Director. Interns who fulfill all program requirements, including a confirming graduate degree, will receive a certificate of completion and will be eligible to take the National Examination for Registered Dietitians. Graduating interns must also:

- Prepare for and complete all required rotations, experiences and assignments to meet graduation criteria.
- Attend all required classes.
- Work as a team on group projects and presentations.
- Complete multiple clinical case study presentations.
- Present to Center for Human Nutrition on a research project.
- Attend internal and external (local) meetings or events as specified by the Program Director.

Grading Scale

Assignments

Although you do not receive letter grades for your CC class and rotation assignments, you still expected to treat them as you would any graduate/master's level work assignments. This means that all assignments must be turned in on time and free of grammatical or spelling errors. Proper citations must be utilized as well. If the work prepared by the intern is deemed inappropriate, then the intern will be asked to redo the assignment. **An overall score of at least 2.8 (out of 4.0)- 70%- is required to pass each rotation. Failing more than 1 rotation is inconsistent with the performance expectations and may result in termination from the program.**

If any assignment is turned in late (without discussion with the Internship Director or the preceptor), the intern will receive a verbal warning. If the intern continues to present work late, then the Director will meet with the intern, and the intern will receive a documented written warning. A continual practice of not turning in work on time or in an appropriate manner may result in termination from the program. The program uses limited distance-based instruction, where virtual classes may be completed onsite or remotely. For any required class content completed remotely, attendance and active participation are confirmed by the Program Director or designees, using the intern-specific log in, attendance records, and on-camera engagements.

Interns enrolled in assigned distance-based learning will access content using an individual log-in on a privacy-protected platform. Individual performance, including rotation and assignment scores,

preceptor feedback, etc., is kept confidential, and only accessible by department or system administrators with permissions privileges specific to intern records. For an elective rotation completed outside the organization confirmation of preceptor evaluation completion is confirmed by the Program Director or designee via email. Distance-based testing is not utilized.

Performance evaluations from your preceptor are due on the last day of the rotation- no exceptions. Intern evaluations of their experience/preceptor are due one week from the completion of the rotation. A survey link to evaluate the rotation is located on the MyLearning Dietetic Internship course.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Dietetic Internship program will occur after the completion of each rotation. This will ensure Dietetic Internship students are meeting the 70% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

You will be expected to be at your scheduled rotations or classes/continuing education opportunities during all established times. Experiences have been scheduled to coincide with departmental operations; therefore, your prompt arrival and consistent attendance are essential. Repeated absences may prevent you from fulfilling program requirements and demonstrating competency.

Orientation classes and events occur the first two weeks of the program, prior to completing any rotations. There are 3 class days in the fall, one in October and 2 the Monday and Tuesday of Thanksgiving week. In April and June, there will be one week of classes during each month. Interns may attend conferences, rounds and other learning opportunities held at CC as long as they do not preclude scheduled assignments and learning experiences. Interns are encouraged to attend other local meetings on their own time and at their own expense. **It is expected for interns to attend at least three Greater Cleveland Academy of Nutrition and Dietetics' (GCAND) meetings.** The Internship Director may designate or recommend other events that count as GCAND meetings. Interns are included in all department-wide communications and virtual meeting invites and encouraged to attend when approved by the rotation preceptor. Any missed mandatory classes or meetings will be made up by reviewing meeting minutes, recorded sessions and/or demonstrating knowledge or competency via demonstration, discussion and/or written submission as assigned by Director.

Personal Days

Interns will each have four personal days to use throughout the program. These days can be used for illness or for job interview opportunities that may take place toward the end of the program and will not need to be made up. Interns will fill out a personal day request form when they need to use one of their four days.

Reporting Absence

Absence for any reason must be reported to the Internship Director and to the preceptor one hour prior to the beginning of your scheduled shift. You are expected to either call or email the Internship Director AND preceptor if you are going to be absent or unexpectedly late. If you miss more than four days throughout the program, this time will need to be made up and may extend the length of the internship. If you miss more than eight days throughout the program or if you miss two days consecutively without notification, then this will be grounds for termination from the program.

Intern Schedules

Intern schedules will be provided to each intern and a master schedule will be posted and updated regularly. The intern is responsible for contacting each preceptor the week prior to each rotation start to coordinate where and when to report for duty. Interns will be expected to work a full day and should expect to attend rotations or classes each weekday of the program from at least 8:00 am to 5:00 pm. Please plan your off-campus activities accordingly. **If it is ever necessary to change your schedule after it has been posted, please contact the Internship Director and your preceptor as soon as possible.** A full day may represent up to 12 hours per day. Some of the inpatient dietitians work four, ten-hour days, instead of five, eight-hour days. It is possible that your schedule will vary from week to week and will vary from preceptor to preceptor. Flexibility in hours worked is expected.

Meals & Breaks

Interns are entitled to a 30-minute meal break and, when schedules permit, a 15-minute break each day. Whenever possible, you will be expected to take these breaks at the same time as your preceptor with whom you are scheduled.

It is up to you whether you want to bring food from home or eat on campus. During food service rotations, meals may be covered. The intern office has a mini-fridge and a free coffee machine. There are multiple refrigerators and microwaves for intern access in the nutrition offices area, as well as multiple choices for purchased food.

Time Off

Interns are not eligible for any vacation or personal holidays. However, you will receive time off for most of the CC-designated holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas.

The Wednesday before Thanksgiving, Thanksgiving Day, and the Friday after will be considered holidays for all interns, along with two weeks during the December holidays. Each intern will select one week for spring break. . Spring break may be scheduled at any time from end of March to end of May at the discretion of the intern and Internship Director.

An intern who is absent from rotations or class for a religious observance may have their rotation or required class work rescheduled without penalty. It is the intern's responsibility to notify the preceptor of the absence prior to the religious holiday and to request a make-up.

Inclement Weather

The Cleveland Clinic does not close because of inclement weather, and employees are expected to attend work or take PTO for inclement weather. During all weather, interns are expected to be on campus or at external sites (if scheduled) unless the Internship Director alerts them that they do not have to come to work. If an intern is going to be late because of weather, they need to contact the Internship Director and their preceptor immediately. Any time missed because of inclement weather will need to be made up, and the intern should make these arrangements with the Director and preceptor.

Tuition and Fees

Tuition

\$10,000 nonrefundable - paid in four installments.

- For interns who commit to the program on March 15th, tuition will be reduced by 50% to \$5,000 total (paid in two installments).

Total Tuition: \$10,000

Other expenses

- Academy Student Membership – \$58.
- Cleveland Academy of Nutrition and Dietetics Student Membership – \$15.
- Up-to-date immunizations or proof of immunity.
- Health Insurance – Variable; REQUIRED; responsible for own arrangements.
- Liability Insurance – REQUIRED; ~\$30-\$45 for student coverage.
- Parking – Free.
- Housing – Variable; responsible for own arrangements.
- No meals are provided.
- Transportation - A vehicle is REQUIRED due to varied schedules and travel to affiliations. Cleveland does have a public transportation system, but this will not be helpful for all sites.
- Travel Expenses – Interns will be responsible for travel and living expenses for elective rotations (if sites outside of Cleveland are selected).

*All fees and expenses are subject to change

Academic Calendar

Date	Calendar Description
August 19, 2024	Fall Term Begins
September 2, 2024	Labor Day - No Class or Clinical
September 6, 2024	Last Day to Receive 75% Tuition Refund
September 17, 2024	Constitution Day- Classes/Clinicals in Session
September 18, 2024	Last Day to Receive 50% Tuition Refund
October 7, 2025	Last Day to Receive 25% Tuition Refund
November 27-29, 2024	Thanksgiving Break – No Class or Clinical
December 20, 2024	End of Fall Term
December 23, 2024- January 3, 2025	Winter Break
January 6, 2025	Spring Term Begins
January 28, 2025	Last Day to Receive 75% Tuition Refund
February 12, 2025	Last Day to Receive 50% Tuition Refund
March 7, 2025	Last Day to Receive 25% Tuition Refund
May 26, 2025	Memorial Day – No Class or Clinical
June 6, 2025	End of Spring Term

Curriculum Outline

September-March		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
NUTR101	Dietetic Technician	0	0	24	24
NUTR102	Core Clinicals- Inpatient 1 & 2	0	0	240	240
NUTR103	Core Clinicals- Outpatient	0	0	120	120
NUTR104	Advanced Clinicals	0	0	360	360
TOTAL TERM					744
March-June		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
NUTR201	Electives	0	0	240	240
NUTR202	Staff Relief	0	0	80	80
NUTR203	Clinical Management	0	0	40	40
NUTR204	Research/QI	0	0	80	80
TOTAL TERM					440
Fall or Spring		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
NUTR400	Patient Foodservice Management	0	0	160	160
TOTAL TERM					160
TOTAL CLOCK HOURS:					1344

Textbooks

Utilization of educational resources is an important part of each intern's training and all interns will receive handbooks and additional reading resources as needed by the program. Interns have a dedicated shared office space, with desktop computers, storage space, office supplies, a refrigerator, and a free self-serve coffee machine. They also each receive a laptop and printed and electronic access to our extensive clinical and professional resources, including the medical library.

Formulary Cards

All of the commercial enteral and oral products used at CC, for adult and pediatric patients, are included on the formulary cards, which are available in hard copy and electronically. It is a useful reference for CHN clinical staff, nursing professionals, and physicians.

Handbooks

- Nutrition Focused Physical Exam Handbook
- Malnutrition Diagnosis criteria
- Nutrition Support Team Handbook
- Gut Rehabilitation and Intestinal Transplant Handbook
- Pediatric Nutrition Handbook
- Nutrition Care Manual (browser-based subscription access)

Professional Appearance

Each intern will be issued two lab coats, which you will wear for all clinical rotations. All other times, you will wear appropriate business casual dress. It is your responsibility to keep the lab coats clean. If you lose your lab coat, then you will need to pay for a new coat. Medical uniforms have been approved for use in many but not all rotations. Please confirm with your preceptor before wearing medical uniforms instead of business casual.

While in food service, comfortable shoes, which have a closed toe and heel, should be worn. You are responsible for purchasing your own work shoes of a solid black or brown color with non-skid soles. Athletic shoes/tennis shoes, canvas or cloth shoes, and open-toed sandals are not permitted. When working in all other areas, clean, business casual shoes may be worn. Open-toed shoes cannot be worn for patient care. A “peep-toe” is fine. For both men and women, shorts are not permitted. Dressy capri pants are fine. Jeans are not part of the Cleveland Clinic dress code. While in food service, all of your hair should be covered by a hairnet or covering provided by the department.

Due to the possibility of bacterial contamination, fake or glued-on fingernails are prohibited in the patient care and food service areas. If you have nails as described, you will be sent home until the nails are removed. In the food service area, gloves must be worn if your nail polish is chipped off. Gloves must be worn whenever there is direct hand contact with food items. Proper hand washing is mandatory. Jewelry is permitted. However, in the food service area, heavy or dangling bracelets, necklaces and earrings are not encouraged.

MEDICAL DOSIMETRY

<i>Program Snapshot: Medical Dosimetry</i>	
Program Director	Jennifer Archambeau, MS, CMD jearch@ccf.org
Location	Main Campus Building CA-50 9500 Euclid Avenue Cleveland, OH 44195
Clock Hours	1664
Program Length	52 weeks / 12 months
Delivery Method	Blended
Total Cost (tuition + fees)	\$10,000

Overview

The Medical Dosimetry Program is a full time, one-year training program to meet the demand for qualified dosimetrists. Graduates will receive a certificate upon completion of the program, which qualifies them to apply for the Medical Dosimetrist Certification Board (MDCB) examination.

Mission Statement

The Mission of the Medical Dosimetry Program is to prepare students to provide accurate, state-of-the-art planning for the radiation oncology patient's treatment.

Upon completion of the program, the graduate will be able to:

- Demonstrate competence as an entry level Medical Dosimetrist
- Demonstrate critical thinking
- Communicate Effectively and Professionally

The Medical Dosimetry Program will provide the profession and community with qualified medical dosimetrists

Objectives

- **Goal 1**
Perform competently as an entry level medical dosimetrist in a variety of clinical settings.
 - **Student Learning Outcome**
 - Produce clinically acceptable treatment plans
 - Prepared for an entry level position
- **Goal 2**
Demonstrate problem solving and critical thinking skills utilized in the practice of medical dosimetry.
 - **Student Learning Outcome**
 - Develop problem solving skills

- Comparison of different treatment modalities and treatment techniques
- **Goal 3**
Communicate effectively with oncology patients and professional staff.
 - **Student Learning Outcome**
 - Students will use effective oral communication skills
 - Students will use effective written communication skills

Accreditation

The Medical Dosimetry Program is accredited by the:

Joint Review Committee on Education in Radiologic Technology
20 North Wacker Drive, Suite 2850
Chicago, IL 60606-3182
312.704.5300
Email: mail@jrcert.org

The program's current award is Probation. General program accreditation information and current accreditation award letter can be found [here](#).

Faculty

Jen Archambeau, MS, CMD, Program Director (full-time)

Education: Certificate, Radiation Therapy, Cleveland Clinic
Certificate, Radiologic Technology, MetroHealth
B.S., Radiologic Technology, University of Mary
M.S., Health Sciences, Cleveland State University

Phone: 216-492-7164 Email: jearch@ccf.org

Matt Kolar, M.S., DABR, Instructor (part-time)

Education: Certificate, Radiology, Trumbull Memorial Hospital School of RT
B.S., Computed Tomography, Kent State University
M.S., Adult Education, Cleveland State University

Phone: 216-445-8403 Email: kolarm@ccf.org

Gina Wess, CMD, Instructor (part-time)

Education: Certificate, Medical Dosimetry, Cleveland Clinic
Certificate, Radiation Therapy, The Ohio State University
Certificate, Radiologic Technology, Meridia Health System
B.S., Geological Sciences, Ohio University

Phone: 216-444-3693 Email: gwess@ccf.org

Tara Gray, Ph.D., Instructor (part-time)

Education: B.S., Nuclear Engineering Sciences, University of Florida
MSBS (Master of Science in Biomedical Sciences), Medical Physics, University of Toledo
M.S., Physics, University of Texas at San Antonio
PhD, Physics, University of Texas at San Antonio

Phone: 216-903-4115 Email: grayt7@ccf.org

Anthony Magnelli, MS, Instructor (part-time)

Education : B.S., Biomedical Engineering, Case Western Reserve University
M.S., Medical Physics, Cleveland State University

Phone: 216-445-1333 Email: magnela@ccf

Facilities

The student office (T4-40c) and Conference Room (CA-LL 040) serve as a classroom and is equipped with a conference table, chairs, laptop and projector, and two personal computers. Word processing and internet access are available. Lockers are available for securing student's personal items. The Upper Callahan Conference/Planning Room (T1-307) and the Radiation Oncology Planning Room (T4-25) are also available for other scheduled events.

Audiovisual equipment includes a laptop, digital projector, slide projector, overhead projector, television, and VCR. An anthropomorphic radio phantom is also available. Organ models and a full skeleton are available for anatomic instruction.

The program director has a private office, which is available for counseling and reviewing academic and clinical evaluations in a confidential environment. Records of prospective, current, and future graduates are securely maintained on file in the program director's office. Faculty also has offices, which are conducive to course planning and other scholarly activities.

The Medical Dosimetry Program's Library contains all the textbooks and supplementary reference books needed for the courses in the curriculum. The program also receives the following journals: Medical Dosimetry, Official Journal of the American Association of Medical Dosimetrists Radiation Therapist, The Journal of Radiologic Sciences Radiologic Technology, The Journal of the American Society of Radiologic Technologists

These journals are utilized for class assignments and to promote independent study and research.

The **Radiation Oncology Department** has an extensive library of radiation oncology textbooks, reference books and journals.

Advisory Board

The Medical Dosimetry Program's Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling educational objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Jennifer Archambeau	MS, CMD	Dosimetrist, Program Director, Cleveland Clinic
Matthew Kolar	M.S., DABR	Physicist, Cleveland Clinic
Ehsan Balagamwala	M.D.	Radiation Oncologist, Cleveland Clinic
Betty Obi	M.D.	Radiation Oncologist, Cleveland Clinic
Ron Young	MBA	Department Administrator, Cleveland Clinic
Ping Xia	Ph.D	Chief Physicist, Cleveland Clinic
Gina Wess	R.T. (R)(T), CMD	Clinical Preceptor, Dosimetrist, Cleveland Clinic
Eric Murray	CMD	Clinical Preceptor, Lead Dosimetrist, Cleveland Clinic
Christian Keiper		Student Representative
Stephen Craig	EdD	Distance Education Specialist

Technical Standards

Physical Requirements/Technical Standards

- Manual dexterity and the ability to participate in assisting patients on and off treatment couches
- Requires standing, sitting, and walking for extended periods of time
- Must lift and carry items weighing up to 50 pounds

Admissions Requirements

To be eligible for admission the applicant must have a:

1. Baccalaureate Degree
2. ARRT registration in Radiation Therapy
3. Completed the following college level or equivalent prerequisite courses with a grade of 'C' or above:
 - Human Anatomy and Physiology
 - Cross-Sectional Anatomy
 - Physics
 - Introductory or Pre-Calculus or the combo of College Algebra and Trigonometry

Additional Requirements

- Pass a criminal background check – prior conviction of a misdemeanor or felony may prevent you from being eligible for the MDCB examination
- Pass Cleveland Clinic's health screening which includes substance abuse testing

Application Process

Applicants must submit the following materials:

- Apply through the Campus Café system
- Official transcripts from college(s) and the radiation therapy program

- Copy of resume
- Three references (see applicant letter of recommendation)

Candidates for admission will undergo an interview with the Department of Radiation Oncology Admissions Committee.

Graduation Requirements

Successful completion of the program is defined as fulfilling each of the following:

- Achievement of a passing grade in all didactic courses.
- Satisfactory performance of all required competency-based evaluations.
- Satisfactory completion of all required clinical rotations.
- Make-up all clinical time lost, due to absence in excess of that allowed. (See make-up time policy.)

The Medical Dosimetrists Certification Board (MDCB) administers a national certification examination in dosimetry. Students are encouraged to apply. Upon successful completion of the educational program, a certificate will be awarded.

Grading Scale

Scale	Grade	GPA	Definition
90-100%	A	4.0	Excellent
80-89%	B	3.0	Good
70-79%	C	2.0	Satisfactory
60-69%	D	1.0	Unsatisfactory
0-59%	F	0.0	Inadequate/Fail
	P		Pass

Clinical Competencies

50% based on the average weekly clinical score

The clinical preceptors meet weekly to score how well each student is performing day to day dosimetry tasks. The task sheet will be emailed to the student at the beginning of each term.

50% based on the total number of competencies completed in each term.

the total # of completed competency evaluations divided by the number of competencies required for each term.

	# of Competencies	Total
Fall	5	5
Winter/Spring	20	25
Spring/Summer	9	34

All competencies (34/34) must be completed by July 18, 2025 in order to graduate.

Clinical Competencies recommended throughout year

(For example 7 out of the 8 listed are required fall quarter for 100%=A)

Unsatisfactory Clinical Evaluations

Should a student receive an unsatisfactory clinical evaluation (defined as a C- or below), the program director and clinical preceptor will meet with the student to review the clinical objectives. Areas of

weaknesses and specific performance expectations of the student will be identified. The student is then given an opportunity to improve his / her performance during their next rotation in that area.

Two consecutive unsatisfactory clinical evaluations or failure to improve any one poor evaluation will result in the student repeating the rotation at the end of his / her twelve months. Graduation will be postponed until satisfactory clinical performance is achieved.

Three unsatisfactory clinical or competency evaluations is cause for dismissal.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Medical Dosimetry Program will occur after the completion of the first, second, and third terms of the program. This will ensure Medical Dosimetry students are meeting the 75% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

The daily schedule may be changed as deemed necessary by circumstances. On clinical days, the Medical Dosimetry student will come in the same shift as their assigned clinical instructor. In any case, ample notice will be given to students.

No more than ten (10) clinical hours shall be scheduled in one day. Combined clinical and academic involvement for students is limited to forty (40) hours or less per week. Any hours in excess of ten/day or forty/week are VOLUNTARY on the student's part and are not required by the program. All make-up time will be structured to meet the clinical objectives of the program. All clinical time will be supervised and evaluated.

Student Schedule

The hours for students are:

- 7:00 AM – 3:30 PM (Early)
- 7:30 AM – 4:00 PM (Regular)
- 8:00 AM - 4:30 PM (Regular)
- 8:30 AM - 5:00 PM (Late)

Monday through Friday

No night or weekend call is required

Lunch: One hour is permitted for lunch

When the students are not in their assigned clinical area, it is required that they let their clinical supervisor know where they are.

Any free time is to be spent in one of the following places:

- Library
- Classroom

Time Off

The total time off for the entire school year is 25 days. This includes the following 15 scheduled days. In addition, 10 unscheduled days are available. These days can be scheduled for vacation or used for an unscheduled absence (see attendance policy). Students are discouraged from taking time off during periods when didactic classes are held. If time is missed for any reason, it is the student's responsibility to make up the clinical or class work.

Make-Up Clinical Time

The student must make-up all clinical time lost, due to absence in excess of that allowed, in order to successfully complete the program.

Clinical time may be made-up by:

- Extending the graduation date.
 - All requirements for graduation must be completed within eighteen months of the start date of the program.

OR

- Completing clinical hours during the scheduled vacation periods.

OR

- Making-up the hours prior to the graduation date.

Calling Off

The Program Director should be notified of any absence from the department. Students must call the Program Director (216-492-7164) each morning of absence prior to the start of the scheduled shift. Leave a message on voicemail or with the program secretary if the program director is not immediately available. The Program Director will notify the appropriate people.

Leaving Early

The students are not permitted to leave early without authorization from the Program Director.

Students are not to ask the Clinical Preceptor/Instructor for permission to leave their assigned areas early, or to go to the Classroom to study. However, if the medical dosimetrists are finished with the daily cases, they can dismiss the student (provided that all charts, calculations, and treatment plans are in order).

Excessive Tardiness

Excessive tardiness and absenteeism negatively affect patient care and department morale and are therefore unacceptable. This policy sets forth standards of appropriate attendance and notification of absence and establishes corrective action standards for unacceptable attendance.

Absences Definitions

Absences will be defined as the following:

Absent (“A”) day / No call occurs when a student fails to provide notification of an absence or provides notification at or after the midpoint of the scheduled shift.

Absent (“A”) day / Late call results when a student fails to provide timely notification of an absence. The student must call the program director prior to the start of the scheduled shift.

Absent (“A”) day occurs when the student fails to attend as scheduled and has insufficient time off to cover the absence (see make-up time policy).

Unscheduled Time Off (UTO) applies when a student fails to report as scheduled, but has met requirement for reporting off in a timely manner. An occurrence of UTO is defined as one or more consecutively scheduled days of UTO. UTO taken for 50% or more of a scheduled shift constitutes an occurrence.

Excessive Lateness Occurs when the student reports one hour or more after the start but prior to the midpoint of the scheduled shift.

Tardy occurs when a student reports more than seven minutes or less than one hour after the scheduled starting time.

Timecards

The program time sheets posted in the student office are used to sign in and out on each scheduled day. The Program Director must be notified if signing in or out is forgotten.

Students are to sign in and out on their own. Students are not permitted to sign each other in or out. Variation from this may be cause for corrective action.

Students who elect to study or gain additional clinical experience during their lunch hour may not enter such on the timecard and leave early or accrue the time without prior approval of the program director.

Overtime

Students are not required to stay overtime in the clinical areas.

If a student stays overtime for clinical education or for patient related activities, the student may then be allowed to receive compensatory time off from clinical duties if taken within the same week or on the next scheduled clinical day. The time off must be authorized by the Clinical Preceptor and the Program Director.

Compensatory time off should not be accrued to be taken at a later date. Any compensatory time will be given at the discretion of the Program Director.

Interview Days

During the second half of the program, students may take time away from practicum for employment interviews. Time off must be pre-approved by the Program Director and will be limited to no more than two half-days. Vacation time is to be used for any time in excess of that allotted.

Tuition and Fees

Tuition will be charged at \$10,000.00 per year.

A non-refundable tuition deposit of \$300.00 is due upon acceptance of the position.

The balance of \$9,700.00 is due before the program starts.

Academic Calendar

Date	Calendar Description
July 30, 2024	Full Tuition Due
July 31, 2024	Orientation Term Begins
September 2, 2024	Labor Day – No Class or Clinicals
September 9, 2024	Fall Term Begins
September 17, 2024	Constitution Day – Classes/Clinicals in Session
October 25, 2024	Last Day to Receive 75% Tuition Refund
November 26, 2024	Last Day to Receive 50% Tuition Refund
November 28-29, 2024	Thanksgiving Break – No Class or Clinicals

November 29, 2024

End of Term

December 2, 2024

December 23, 2024 - January 3, 2025

January 11, 2025

May 2, 2025

Winter/Spring Term Begins

Winter Break

Last Day to Receive 25% Tuition Refund

End of Term

May 5, 2025

May 26, 2025

July 4, 2025

July 18, 2025

Spring/Summer Term Begins

Memorial Day – No Class or Clinicals

Independence Day – No Class or Clinical

Graduation/ End of Term

Curriculum Outline

Orientation Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DOS201*	Dosimetry	36	0	0	36
DOS111	Computers and Computer Networking	10	0	0	10
DOS101	Medical Dosimetry Orientation	12	0	0	12
DOS211*	Radiation Treatment Planning	12	0	0	12
DOS511	Clinicals Phase 1	0	0	153.5	153.5
TOTAL TERM					223.5

Fall Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DOS211*	Radiation Treatment Planning	13	0	0	13
DOS301*	Radiation Physics	4	0	0	4
DOS521	Clinicals Phase 2	0	0	352.5	352.5
TOTAL TERM					369.5

Winter/Spring Term		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DOS221	Pathophysiology and Oncology Management	36	0	0	36
DOS301*	Radiation Physics	28	0	0	28
DOS211*	Radiation Treatment Planning	6	0	0	6
DOS531	Clinical Phase 3	0	0	624	624
TOTAL TERM					694

Spring/Summer Term		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
DOS301*	Radiation Physics	2	0	0	2
DOS501	Board Review	18	0	0	18
DOS541	Clinical Phase 4	0	0	351	351
DOS211*	Radiation Treatment Planning	6	0	0	6

TOTAL TERM 377

TOTAL CLOCK HOURS: 1683.2

**Course spans over multiple terms*

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
978-0781785419	Treatment Planning in Radiation Oncology	Khan, Faiz	2nd	2007	Lippincott, Williams & Wilkins
978-1620700358	Handbook of Treatment Planning in Radiation Oncology	Videtic G., Woody N.	2nd	2014	Demos Medical Publishing
978-0826122445	Strategies for Radiation Therapy Treatment Planning	Xia P., Godley A., Shah C., Videtic G.M.M., Suh J.H.	1st	2019	Demos Medical Publishing

Professional Appearance

Scrubs dark blue or CCF policy for business casual. Required to wear dosimeters

MEDICAL LABORATORY SCIENCE

<i>Program Snapshot: Medical Laboratory Science</i>	
Program Director	Barbara Zingale, MSIT, MLS(ASCP) ^{CM} zingalb@ccf.org
Location	Main Campus L Building, Room L1-371 9500 Euclid Avenue Cleveland, OH 44195
Clock Hours	1427
Program Length	50 weeks / 12 months
Delivery Method	Residential
Total Cost (tuition + fees)	\$7,500

Overview

The Medical Laboratory Science Program is a 50-week, full time program designed to prepare students for the ever-changing landscape of the field of laboratory science. Students who successfully complete the program are eligible to apply for the Medical Laboratory Science (MLS) national certification examination offered by the American Society for Clinical Pathology, Board of Certification (ASCP-BOC).

Mission Statement

To provide the highest quality classroom and laboratory education preparing students to be proficient medical laboratory scientists.

Objectives

Upon successful completion of the Medical Laboratory Science program, the graduate will be able to:

- Perform specimen collection and processing procedures, evaluate specimen adequacy, and resolve issues related to specimen processing
- Perform and evaluate pre-analytical, analytical, and post-analytical procedures to ensure quality lab results
- Perform chemical and biological analytical test procedures on body fluids and tissues, evaluate lab data to correlate test results with clinical significance, and identify and correct problems
- Explain the methods and principles in the laboratory tests performed in the clinical laboratories
- Operate laboratory instrumentation with basic proficiency, performing basic maintenance on a routine basis
- Identify problems with instrumentation and follow the defined process for resolution
- Identify the physiological functions of each organ or organ system that are evaluated by laboratory testing and correlate them
- Evaluate test results, identify the probable disease associated with the results, and suggest confirmatory testing
- Explain sources of error and any effects of interfering substances on test results, including recognizing results that are inconsistent with physiological disease states
- Use the defined quality assurance programs to ensure the accuracy and reliability of the information being produced, including recognizing out of range quality control results and

- taking appropriate actions
- Evaluate new techniques or procedures for clinical usefulness, cost effectiveness, standards of performance, and establishing reference ranges
- Prepare and present educational material for new employees, support personnel, students, and continuing education programs
- Understand and apply principles of management and supervision, including lab safety, budgeting, instrument selection, human resource management, and governmental regulations as they apply to the clinical laboratory
- Participate in laboratory research, assisting with developing protocols, performing data collection, interpreting the results using statistical analysis, and presenting the findings
- Demonstrate a professional attitude in all interactions, maintain a willingness and enthusiasm to learn and accept instruction and suggestions in a positive, constructive manner, and continue to develop themselves professionally
- Practice medical and professional ethics
- Communicate ideas effectively in oral and written form; use electronic methods to communicate, collaborate and disseminate information

Accreditation

The Cleveland Clinic Medical Laboratory Science Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Further information can be obtained by contacting NAACLS at 5600 N. River Road, Suite 720, Rosemont, IL, 60018, by phone at 773-714-8880 or by visiting the NAACLS website at www.naaccls.org.

Faculty

Barbara Zingale, MSIT, MLS(ASCP)^{CM}, Program Director (full-time)

Education: Certificate, Project Management, Cleveland State University
B.S., Medical Technology, Florida Atlantic University
M.S., Information Technology, Capella University

Phone: 216-310-0671 Email: zingalb@ccf.org

Sonja Bruketa, MLS(ASCP), Lead Laboratory Education Specialist (full-time)

Education: Certificate, Medical Technology, Cleveland Clinic School of Medical Technology
B.S., Biology, Cleveland State University

Phone: 216-444-8577 Email: brukets@ccf.org

Ryan Collison, MLS(ASCP)^{CM}SC^{CM}, Lead Laboratory Education Specialist (full-time)

Education: B.S., Biology (Medical Technology concentration), Shippensburg University of Pennsylvania
B.S., Medical Technology, Shippensburg University of Pennsylvania

Phone: 216-444-5476 Email: collisr@ccf.org

Gerald Hicks, MBA, MLT(AMT), PBT(ASCP)^{CM}, Instructor, (full-time)

Education: A.S., General Science, Lorain County Community College
B.S., Applied Science, Allied Health, Youngstown State University
MBA, Business Administration, University of Northwestern Ohio

Phone: 216-372-6861 Email: hicksg@ccf.org

Rita Khongphatthana, MLS(ASCP)^{CM}, Laboratory Education Specialist (full-time)

Education: Certificate, Medical Laboratory Science, Cleveland Clinic School of Medical Laboratory Science
B.S., Medical Technology, Kent State University

Phone: 216-308-0801 Email: bkhongpr2@ccf.org

Erick Tobin, M(ASCP)^{CM}, Laboratory Education Specialist (full-time)

Education: B.S., Applied Health (Microbiology specialization), Bowling Green State University

Phone: 216-219-2775 Email: tobine@ccf.org

Hilary Klenjoski, MLS(ASCP)^{CM}, Laboratory Education Specialist (full-time)

Education: Certificate, Medical Laboratory Science, Cleveland Clinic School of Medical Laboratory Science
A.S., Science, Cuyahoga Community College
B.S., Biology, Baldwin Wallace University

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Kate Landfried, MLS(ASCP)^{CM}, Laboratory Education Specialist (full-time)

Education: Certificate, Clinical Laboratory Technology, Rochester General Hospital
B.S., Medical Technology and Molecular Biology, PennWest

Phone: 216-444-6023 Email: zoccolk@ccf.org

Amy Miller, MLS(ASCP)^{CM}, Laboratory Education Specialist (full-time)

Education: Certificate, Medical Laboratory Science, Cleveland Clinic School of Medical Laboratory Science
B.S., Medical Laboratory Science, Miami University
B.A., Biology, Miami University

Phone: 216-904-8674 Email: buenina2@ccf.org

Pinal Patel, MLS(ASCP)^{CM}, Laboratory Education Specialist (full-time)

Education: B.S., Medical Laboratory Science, Youngstown State University
B.S., Microbiology, Gujarat State University

Phone: 216-444-5477 Email: patelp8@ccf.org

Facilities

The Medical Laboratory Science Program has dedicated space within the Center for Pathology Education suite consisting of two conference/lecture rooms, two huddle rooms, and cubicles for up to 16 MLS students. The L1-377 conference room is used as the exam room and has 28 dedicated laptops that are used for the proctored online exams and quizzes. The program also has access to 10 conference and several huddle rooms used at various times throughout the year for lectures, classroom activities, exam reviews and exams. These rooms all contain projectors and screens with computers or LCD monitors. Huddle rooms are commonly used for small study sessions and other small group activities.

Students have access to a variety lab spaces with educational equipment to facilitate learning, including a 10 headed scope for large group slide review sessions and a five headed scope for small group sessions. There are two and three headed scopes in the student labs and in the Hematology and Microbiology laboratories. Students perform their hands on training in student labs. Each of the two student lab spaces are spacious enough to accommodate at least eight students at a time. These are equipped with equipment that has been either purchased or refurbished within the last five years. In the clinical portion, they are integrated into the daily workflows with the techs in the labs and get experience on all of the instruments.

Advisory Board

The Medical Laboratory Science Program's Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Barbara Zingale	MSIT, MLS(ASCP) ^{CM}	Program Director, Cleveland Clinic
Susan Harrington	Ph.D., D(ABMM), MLS(ASCP) ^{CM}	Medical Director, Cleveland Clinic
Adam McShane	PhD.	Medical Director, Automated, Biochemistry Professional Staff, Cleveland Clinic
Michele Wasuk	MLS(ASCP) Administrator, RT-PLMI	Lab Administrator, Cleveland Clinic
Marcia Chappel	MLS(ASCP) Manager, Hematology, RT-PLMI	Lab Department Manager, Cleveland Clinic
Kate Landfried	MLS(ASCP) ^{CM}	Laboratory Education Specialist, Microbiology MLS Faculty, Cleveland Clinic
Rita Khongphatthana	MLS(ASCP) ^{CM}	Laboratory Education Specialist, Molecular Diagnostics Program Graduate, Cleveland Clinic
Celeste Dean-EI	MLS(ASCP) ^{CM} SBB(ASCP) ^{CM}	Divisional Director, IRL, American Red Cross External Laboratory Employer In-field specialist
Sondra Turner	MLS(ASCP)	Laboratory Director, Akron General

		Hospital Clinical Affiliate representative
Joan O'Connell	EdD, MEd, MLS(ASCP)	Assistant Professor/Director, Youngstown State University Academic Affiliate representative, in- field specialist
Barb Brown	MEd, MLS(ASCP) ^{CM}	Program Director, Cincinnati Children's School of Medical Laboratory Science Community Representative, in-field specialist

Technical standards

In addition to the Program's academic demands there are non-academic demands. Every applicant is expected to meet these requirements in order to participate in the Program.

Physical and Motor Skills

Students must:

- Have fine motor dexterity to collect patient samples, use a microscope, and operate and repair laboratory equipment.
- Have gross motor dexterity to process samples, physical mobility to collect blood specimens from patients, and stamina to tolerate a physically demanding workload.
- Be able to stand for long periods of time and maneuver through crowded spaces to collect specimens.

Sensory/Observational Skills

Students must:

- Be able to participate in lab and clinical practical demonstrations.
- Have visual acuity sufficient to use microscopes to perform analysis requiring distinguishing structural details and staining characteristics of cells and microorganisms.
- Be able to view computer screens for extended lengths of time.
- Be able to visually identify reactions on slides, test tubes, microwells, and probe colors on slides.

Communication Skills

Students must:

- Be able to communicate in English, both verbally and in writing to all staff, employees, students, patients and other healthcare workers
- Be able to complete written assignments and participate in classroom discussions..

Intellectual and Qualitative Skills

Students must:

- Have the ability to calculate, measure, interpret and evaluate laboratory data and other research materials.
- Have the ability to organize their work, solve problems, think critically, and make appropriate judgments.

Professionalism and Social Behavior Skills

Students must:

- Have the ability to follow directions, manage time, and meet deadlines
- Be able to function as part of a team and act as a professional
- Have the ability to work under pressure, maintaining a calm demeanor and demonstrating maturity
- Be able to adhere to the regulations of accrediting agencies, comply with safety regulations of the laboratory and maintain a safe environment for themselves and others
- Be able to act as a professional by wearing appropriate dress, using proper behavior and maintaining personal honesty and integrity.

Admissions Requirements

The Medical Laboratory Science Program seeks student applicants who:

- Demonstrate familiarity with clinical laboratory science.
- Match personal attributes with those required for practice of medical laboratory science

Applicants must demonstrate a capacity for academic achievement:

- Minimum Cumulative GPA of 2.5
- Minimum Chemistry GPA of 2.5
- Minimum Biology GPA of 2.5
- Minimum Mathematics GPA of 2.5

Desirable attributes of Applicants:

- Logical thought processes facilitating problem solving
- Strong communication skills
- Dependability and a sense of responsibility
- Courtesy and respect in personal relationships
- Internal motivation
- Integrity
- Maturity
- Interests or hobbies that enrich personal satisfaction
- Ability to follow directions
- Ability to react appropriately and to maintain poise and control under stressful conditions

Academic Requirements

Applicants must be enrolled as a medical laboratory science student at an affiliated school as described below. Students not attending an affiliate institution as a 3+1 student must have a bachelor's degree in a biological, chemical or physical science or medical/clinical laboratory science or medical technology prior to the first day of the clinical year. No 3+1 students from non-affiliated schools will be considered for enrollment.

Medical Laboratory Science program has formal affiliation agreements with a number of universities and colleges. Contact the academic program advisor or the MLS Program Director for affiliation status.

The applicant must have a minimum of 90 semester hours (135 quarter hours) of academic credit in a baccalaureate degree program from an accredited institution, including the following courses:

- Chemistry:
 - A minimum of 16 semester hours (24 quarter hours) acceptable toward a chemistry major is required. A course in organic chemistry or biochemistry must be included. Biochemistry is strongly recommended.
- Biological Sciences:
 - A minimum of 16 semester hours (24 quarter hours) acceptable towards a biology major

is required. Microbiology and immunology are required. Genetics and anatomy & physiology are strongly recommended.

- Mathematics:
 - One course in college mathematics is required. Remedial mathematics courses do not satisfy the mathematics requirement. A course in statistics is strongly recommended.
- International Applicants:
 - Students whose baccalaureate degree is from a non-English speaking country must submit Test Of English as a Foreign Language (TOEFL) scores. The scores must be less than two years old. Reports need to be sent directly from the test provider to the Program Director.
 - Minimum IBT score of 75, with minimum speaking and written of 17 each is required.

Application Process

When all the application materials have been submitted through the Campus Café system, the applicant's academic qualifications are evaluated.

Applicants meeting the minimum criteria *may* be contacted to make an appointment for a personal interview. Please note that meeting the minimum criteria does not guarantee an interview.

If you are contacted, an interview is required. Face-to-face interviews are preferred, but virtual interviews can be requested by the applicant. This will be decided by the Program Director on a case-by-case basis.

Letters of Recommendation are not required but will be accepted. Letters will be reviewed prior to selecting a candidate for an interview. They are not considered in the overall scoring of the applicant. It is the responsibility of the applicant to see that deadline for submitting applications and other application materials is met.

After the interview, each applicant who has completed the process will be scored on non-academic characteristics, using information gathered from the application form and interview.

The relative weights given to each source of information are:

- Academic criteria: 60 percent of total score
- Non-academic criteria
 - Application form: 15 percent of total score
 - Interview: 25 percent of total score
- Acceptable applicants will be ranked and selected in order of their total scores.
- The MLS program guarantees placements for all students who have paid the deposit fee after having been accepted into the program.

Graduation Requirements

Acceptable performance in all courses must be achieved in order to complete the program. A student must complete the entire program to be eligible to sit for any certification examination. This includes satisfactory academic and laboratory performance along with satisfactory completion of the comprehensive final examinations. Criteria for acceptable performance are determined by the student's performance throughout the entire school year. The criteria are outlined in the Student Academic Standards section of this handbook.

Successful completion of the program entitles the graduate to a Certificate of Completion from the Cleveland Clinic Medical Laboratory Science program. It may also be credited toward a baccalaureate degree through affiliated colleges. The Certificate of Completion will not be contingent upon a candidate having passed a Medical Laboratory Science certification examination.

There is no option in this program for advanced placement to bypass any coursework. Because the Cleveland Clinic is not a degree granting institution, the credits earned in this program cannot transfer to any other institution. All coursework and learning experiences must be completed during the program.

For this reason, students cannot earn credit for experiential learning, even if they were previously a Medical Laboratory Technician (MLT) or have experience working in a clinical testing laboratory.

Certification Exam

Graduates are eligible to sit for certification examinations given by the American Society of Clinical Pathologists (ASCP) Board of Certification (BOC).

The ASCP BOC certification examination is given throughout the year. The BOC is the oldest and largest certification agency for laboratory professionals having certified more than 600,000 individuals since its establishment in 1928. It has become the gold standard for certification of medical laboratory personnel. Detailed information regarding application, eligibility and testing sites can be found on the ASCP website at www.ascp.org.

Grading Scale

Scale	Grade	GPA	Definition
93 – 100	A	4.00	Excellent
90 – 92	A-	3.70	Excellent
87 – 89	B+	3.30	Above Average
83 – 86	B	3.00	Above Average
80 – 82	B-	2.70	Above Average
77 – 79	C+	2.30	Average
73 – 76	C	2.00	Average
70 – 72	C-	1.70	Average
67 – 69	D+	1.30	Below Average
63 – 66	D	1.00	Below Average
60 – 62	D-	0.70	Below Average
0 – 59	F	0.00	Failure

- If a student scores below a 70% on any exam (written or practical), the exam is considered unsatisfactory.
- Students are required to complete all exams in every course. No extra credit will be given to increase the overall exam grade.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Medical Laboratory Science Program will occur after the completion of each of the seven course sections. This will ensure Medical Laboratory Science students are meeting the 75% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

Students are expected to be in attendance Monday through Friday, 7:30 am to 3:00 pm

- **Exceptions:** Some laboratory areas may require a start time of 7:00 am. In that instance, students will be allowed to leave at 2:30pm.
- **Lunch:** Up to 60 minutes taken at the discretion of the instructor and at a time that accommodates the laboratory schedule and work flow. The lunch break may be shortened if the student lab, lecture or clinical experience runs over into the lunch break. Lunch breaks will be taken mid-day.
- **Breaks:** Breaks may be taken upon the discretion of the instructor throughout the program day. Breaks are not guaranteed and are dependent on the learning activities for the day.
- **Staying Late:** Some laboratory work may require staying beyond 3:00 pm to complete the laboratory work or assignment.

Expectations

MLS students are training to become professionals. It is, therefore, reasonable to expect each student be in attendance 35 hours per week and develop attitudes and habits characteristic of professionals. Maintaining a stable and reliable work force is critical to the effective and efficient delivery of health care services. Excessive tardiness and absenteeism negatively affect patient care and employee morale and are considered unacceptable.

A student's general attitude, attendance record, and promptness are heavily considered when judging dependability and willingness to accept responsibility. It is anticipated that a student will want to seek employment at the Cleveland Clinic when training is completed and the impression they make on the staff and employees in various departmental rotations will be taken into consideration when hiring decisions are made. In any case, attendance is an important consideration wherever one may seek employment.

It is the responsibility of the MLS student to:

- Attend ALL scheduled lecture and laboratory sessions, arriving on time and demonstrating respect for the speaker/instructor and an interest in the material being presented. All learning activities are mandatory, unless the Lab Education Specialist decides otherwise.
- Prepare ahead of time for every lab or lecture. Most course materials are online and students are expected to maximize class time by reviewing and learning the material prior to the lecture/lab.
- Use any spare time during the scheduled seven-hour day working on assigned projects or studying, without the expectation of regular time out of the laboratory for this activity.
- Be in attendance AND available between the scheduled program hours each day
- Be patient and flexible, remembering patients first. An instructor may be immersed in patient work and unavailable to work with students at the exact time noted on the class schedule. Students are encouraged to assist with the task at hand, if possible.
- Make a reasonable attempt to report as scheduled despite inclement weather conditions.
- Swipe in and out at the time clock closest to where the student is scheduled each day.
- Be available at all times during the day. Breaks are not to be used for activities that should be done on personal time such as going to the gym.

Time Keeping

All hours of attendance are recorded electronically using the Kronos timekeeping system. It is the responsibility of the student to record arrival and departure times in Kronos with their identification badge daily. Failure to do so must be immediately reported to the Program Director. The time recorded in Kronos is the official attendance record.

Calling Off

Absences are classified as Excused, Unexcused, or Tardy/Leave Early. Students must send an **EMAIL** to the Program Director and the Lab Education Specialist at least one hour prior to the designated start time to report an absence. Habitual or excessive absences may result in progressive disciplinary action. **Text messages are not acceptable notification.** If a text message is received, the time will be counted as unexcused.

Swipe “windows”

Students must swipe in between 6:30am and 7:30am each day. At the end of the day, students must swipe out between 2:55 and 3:00pm. If the student swipes outside of these times or forgets to swipe, they will be penalized with points for tardy, leave early or missed swipes.

Personal Time off (PTO)

16 hours of PTO will be allowed each semester for illness, emergent or personal situations during the DIDACTIC portion of the semester only. Exceeding 16 hours of the allotted PTO requires that time to be made up before the end of the semester. Excess PTO that cannot be made up will accrue one point per hour.

- If taking more than 16 hours of PTO in a row due to illness, the student must bring in a doctor's note. This may excuse the PTO usage.
- NO PTO will be granted during clinicals.
- Any clinical time missed must be made up before the end of the semester. Excess missed clinical time will accrue one point per hour. Missed clinical time missed in the 2nd semester may result in delayed or rescinded ASCP BOC exam eligibility.

Earned PTO (EPTO)

- Students can earn up to 8 hours of additional PTO each semester to be used for additional time off during didactic portion or to offset excess PTO usage.
- Time can be earned for donating blood (2hr), volunteering at the Greater Cleveland Food Bank, participating in the Lab Week virtual 5K or other voluntary activities that need to be approved prior to the activity.
- Students must bring in documentation from the event coordinator to prove that the hours were earned completing the activity.
- Earned hours can offset excess PTO usage during didactic portion or missed clinical hours.
- No more than 8 hours of EPTO can be used each semester.

Excused Absences

Illness

- Taking time off for an illness WILL count against the PTO allotment.
- If the student will be out for more than 2 days (using greater than 16 hours PTO) due to illness, a doctor's note will be required to be submitted upon the student's return. This may excuse the PTO usage, depending on the student's situation.
- If a student comes in when sick (fever, cough, etc.) and is sent home, they will use PTO for the remainder of the day. Cleveland Clinic and the MLS program strongly suggest that employees and/or students do not come into their facilities while sick to prevent the spread of illness to patients or other caregivers.

Early Dismissal/Day Off

- Only when approved by Program Director or Lab Education Specialist
- Will NOT count against the PTO allotment.

HR appointments

- Time off for Cleveland Clinic-related pre-employment appointments and orientation are NOT counted towards the student's PTO allotment but must be approved by Program Director in advance.
- Time off for non-Cleveland Clinic employment issues or job interviews is counted against the PTO allotment.

Professional Meeting Attendance

- Attendance at a professional (MLS) meeting will not count against the PTO allotment. Student must obtain prior approval and bring in evidence of attending the entire meeting or it will be counted against the PTO allotment. The exception to this documentation rule is attendance at the ASCLS Meeting and Academic Bowl competition with the rest of the class.

Weather Emergencies

- If Cleveland Clinic declares a weather emergency, students will not be charged with a tardy if they are late. If students do not come in at all, the time will be considered unexcused. The Program Director may deviate from this rule on a case-by-case basis.

Unexcused Absences

- Any absence not listed above
- Failure to comply with the one-hour call in/email requirement

Each occurrence of unexcused absence will result in progressive disciplinary action leading up to program dismissal.

Tardy/Leave Early/Improper Swipes

- Tardy – begins one minute after the scheduled start time. If a student arrives more than 30 minutes late, they will be penalized with a tardy AND will have to use their PTO for the balance of missed time.
- Leave Early -- leaving more than 15 minutes prior to the scheduled end time, without permission from the Program Director.
- Improper swipes – Students swiping in earlier than 6:30am, forget to punch in/out, double swipe in/out.
- Forgotten badges – will count as a single infraction for the day. Students must notify the Program Director in the morning of their arrival time and again upon departure so that their times can be manually entered into Kronos.

Penalty for Attendance Infractions

- Beginning with the third point accrued for a failure to swipe in/out, unexcused tardy, leave early, improper swipe, forgotten ID badge, unexcused absence or unavailable PTO, each subsequent occurrence will result in accruing one attendance point.
- Excess PTO that isn't made up by the end of the semester will accrue one attendance point per hour.
- Clinical hours that aren't made up by the end of the semester will accrue one attendance point per hour.

Any deviation from the rules stated above is solely at the discretion of the Program Director.

Spare Time

Students should not expect to be scheduled additional study time during the clinical experience part of

each semester. If the laboratory work is slow or the instructor is busy and unable to work with the student, the student is expected to use this time for studying. There are several areas where this may be done:

- A designated area in the laboratory as identified by the Lab Education Specialist
- One of the laboratory building conference rooms or libraries if not in use
- Huddle rooms or student cubicles
- Other locations on Main Campus

The Lab Education Specialist must be aware of the student's study location at all times so they can be located when needed.

Spare time is not to be used for sleeping, watching videos, viewing non-laboratory related websites, going to the on-site gym or any other non-laboratory related activities. Students that are caught doing non-laboratory related activities during working hours will be given one verbal warning to discontinue that activity. Subsequent findings of inappropriate behavior will result in progressive disciplinary action.

Withdrawal Policy

A student may withdraw from the program at any time. A written letter of intent indicating the anticipated date of withdrawal must be submitted to the Program Director. The reason for the withdrawal is not required. Once the letter of intent is received by the School, the Program Director will set up a meeting with the student to discuss the withdrawal.

The withdrawing student is responsible for returning any borrowed reference materials belonging to the School. The student must surrender their temporary ID badge prior to departure on the last day. There will be no reimbursement for any expenses incurred as a result of being in the Program. The student will be asked to complete a final program evaluation prior to departure.

Students withdrawing from the program prior to January 31st of the clinical year will be considered withdrawn. Students withdrawing from the program after January 31st will be counted as incomplete and will be included in the published outcomes measures according to NAACLS Standards.

Tuition and Fees

Tuition is \$7,500. 4 + 1 students are responsible for their own tuition payments. 3 + 1 student tuition is paid from the tuition the student pays to the degree-granting institution, except when the affiliation agreement states otherwise. In that instance, the student is responsible for the out-of-pocket tuition cost. It is the 3+1 student's responsibility to confirm how their tuition is to be paid.

Upon acceptance to the program, a non-refundable deposit of \$250 is required from all students. This payment is applied to the total tuition cost. The program uses this payment to cover the cost of the ASCP BOC exam at the end of the clinical year for all the students that are expected to successfully complete the program.

Payment can be made in a lump sum or multiple installments. If paying in installments, one half of the tuition is due the first week of training and the balance is due no later than January 31st during the clinical year. Payment is to be made online in the same manner as the application fee. Checks and/or cash are not an acceptable form of payment.

Students that do not pay tuition within the agreed upon timeframe will no longer be eligible to participate in the program until such time as the tuition is paid. Any tuition payment arrangements made through the office of Registrar may be subject to final approval by the Program Director.

Other Expenses

- Textbooks – approximately \$700
- Supplies – notebooks, shoes, etc.
- Medical insurance
- Vaccinations or lab tests proving immunity

Academic Calendar

Date	Calendar Description
July 8, 2024	Fall Semester Begins
July 31, 2024	Last Day to Receive 75% Tuition Refund
August 16, 2024	Last Day to Receive 50% Tuition Refund
September 2, 2024	Labor Day – No Class or Clinical
September 9, 2024	Last Day to Receive 25% Tuition Refund
September 17, 2024	Constitution Day – Classes/Clinicals in Session
November 25-29, 2024	Thanksgiving Break - No Class or Clinical
December 13, 2024	End of Semester
December 16-27, 2024	Semester Break - No Class or Clinical
December 30, 2024	Spring Semester Begins
January 1, 2025	New Years Day – No Class or Clinical
January 25, 2025	Last Day to Receive 75% Tuition Refund
February 12, 2025	Last Day to Receive 50% Tuition Refund
March 3-7, 2025	Spring Break - No Class or Clinical
March 11, 2025	Last Day to Receive 25% Tuition Refund
Monday May 26, 2025	Memorial Day – No Class or Clinical
Friday June 27, 2025	End of Semester

Curriculum Outline

SECTION 1 - Chemistry			Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total	
MLS5501	Chemistry I	29	54	35	118	
MLS5502	Chemistry II	29	54	35	118	
SECTION TOTAL					236	
SECTION 2 - Hematology			Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total	
MLS 5201	Hematology I	17	36	35	88	
MLS 5202	Hematology II	17	36	35	88	
MLS 5203	Hemostasis and Thrombosis	9	18	17	44	
MLS 5204	Urinalysis & Body Fluid Analysis	11	18	18	47	
SECTION TOTAL					267	
SECTION 3 - Bacteriology			Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total	
MLS 5101	Bacteriology I	14	38	35	87	

MLS 5102	Bacteriology II	17	42	35	94
MLS 5103	Mycology & Mycobacteriology	11	18	17	46
MLS 5104	Parasitology	14	22	18	54
SECTION TOTAL					281

Section 4 – Immunopathology		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
MLS 5301	Immunopathology I	13	32	35	80
MLS 5301	Immunopathology II	9	30	35	74
SECTION TOTAL					154

SECTION 5 - Immunohematology		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
MLS 5401	Immunohematology I	16	36	35	87
MLS 5402	Immunohematology II	16	36	35	87
SECTION TOTAL					174

SECTION 6 – Laboratory Operations		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
MLS 5601	Laboratory Operations I	19	35	35	89
MLS 5602	Laboratory Operations II	37	35	35	107
MLS 5603	Laboratory Operations III	12	35	0	47
SECTION TOTAL					243

SECTION 7 – Molecular Diagnostics		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
MLS 5701	Molecular Diagnostics	11	26	35	72
SECTION TOTAL					72
TOTAL CLOCK HOURS					1427

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9780803668881	Modern Blood Banking & Transfusion Practices	Harmening, D.	7th	2018	F.A. Davis
9781284238860	Clinical Chemistry: Principles, Techniques and Correlations	Bishop ,M., Fody, E., & Mistler, J.	9th	2022	Jones & Bartlett Learning
9780323530453	Rodak's Hematology: Clinical Principles and Applications	Keohane, E., Otto, C., & Walenga, J.	6th	2019	Elsevier
9780803675827	Urinalysis and Body Fluids	Strasinger, S. & DiLorenzo, M.	7th	2020	F.A. Davis
9780323711937	Immunology and Serology in Laboratory Medicine	Turgeon, M.	7th	2021	Mosby
9780323595995	Quick & Easy Medical Terminology	Leonard, P.	9th	2019	Elsevier
9780943903187	Laboratory Management, Principles and Processes	Harmening, D.	4th	2020	D. H. Publishing
9780323829977	Textbook of Diagnostic Microbiology	Mahon, C., & Lehman, D.	7th	2023	Saunders

9780803668294	Molecular Diagnostics: Fundamentals, Methods, and Clinical Applications	Buckingham, L.	3rd	2019	F.A. Davis
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Professional Appearance

- Scrubs of any color can be worn on a regular basis. The only colors that are not allowed to be worn are white, hunter green, navy and surgical blue. However, students can wear white pants and a colored top or green top and navy pants or any combination of those colors. Just not both top and bottom in any of those four colors.
- If not wearing scrubs, business casual attire must be worn. This means no jeans and all shirts must have collars. Blouses must have sleeves. Socks or stockings must be worn. Skirts cannot touch the floor. Clothing must fit properly.
- Regardless of the attire worn, the tops and bottoms must always be overlapping, even when the student's arms are raised. It may be helpful to wear a t-shirt or tank top under clothing to prevent bare skin from showing when raising arms or sitting down. No midriffs can be exposed.
- The Program Director has the right to determine if apparel is inappropriate and will send a student home to change clothing if necessary.

PARAMEDIC EDUCATION

<i>Program Snapshot: Paramedic Education</i>	
Program Director	Danya Morris, M.A.Ed., RN, NRP morrisd15@ccf.org
Location	Akron General 1 Akron General Ave Akron, OH 44307
Clock Hours	962
Program Length	40 weeks / 10 months
Delivery Method	Residential
Total Cost (tuition + fees)	\$6,600

Overview

A Paramedic Education Program is a 10-month (4 phases), part-time program that prepares students to provide pre-hospital emergency care to the acutely ill or injured patient. The program is offered at Akron General (day and evening options) and University of Akron – Wayne College. Graduates of the program are eligible to take the National Registry Paramedic psychomotor and cognitive examination upon completion.

Mission Statement

To provide initial education to emergency medical service professionals, to create competent entry-level providers, and to further the mission of the Cleveland Clinic.

Objectives

The goals of the Paramedic Education Program is to:

1. To prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.
2. Prepare students to pass the written and practical National Registry examinations at the Paramedic level.
3. Provide competent, confident, and independent thinking Paramedics for the communities they serve.

Accreditation

The Paramedic Education Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs
727-210-2350
www.caahep.org

To contact CoAEMSP:
214-703-8445
www.coaemsp.org

The Paramedic Education Program is accredited by the Ohio Department of Public Safety.

Ohio Department of Public Safety
1970 W Broad St.
Columbus, OH 43223
(844) 644-6268

Faculty

Danya Morris, M.A.Ed., RN, NRP, Program Director (full-time)

Education:	Certificate, Paramedic, Cleveland Clinic Akron General A.D.N., Associate Degree of Nursing, Hutchinson Community College B.A., Major: Social Cognitive Psychology, Minors: Anthropology and Education, Bates College M.A.Ed, Adult Education and Curriculum Design, Goddard College		
Phone:	(330) 344-6504 (office) (330) 803-5369 (cell)	Email:	morrisd15@ccf.org

Hugh Dodd, MSN, RN, EMT-P, FESI Manager of Paramedic Education (full-time)

Education:	A.A.S., Paramedicine, Southern Maine Community College A.A.S., Nursing, Stark State College B.A., Music, University of Washington M.S.N., Operational Leadership, Quinnipiac University		
Phone:	(330) 344-6504 (Office) (330) 803-6912 (Cell)	Email	doddh2@ccf.org

Facilities

There are multiple classrooms, labs, and auditorium spaces that are used for the students at Akron General and University of Akron - Wayne College.

Akron General

The Paramedic Education has a classroom equipped with one desktop and 24 laptops available for up to 32 students. The room also contains 1 screen with 2 TVs to extend viewing to the back of the classroom. The program's lab is houses adequate equipment to effectively trains students, including: Suction equipment (powered and manual), cardiac monitor, backboard, cot with trauma mannequin, ACLS mannequin (can be defibrillated and intubated), CPR mannequin, gloves in all sizes, IV arm, radio, EMT supply bag, Paramedic supply bag, pediatric bag, drug box (stocked with demo-dose/fake medications comparable to what would be carried on an ambulance), airway mannequin(s) for intubation, 2 airway bags (intubation equipment), IO drill with supplies, adult and pediatric IO trainers, and oxygen administration equipment.

An auditorium is available for reservation as an additional classroom space.

University of Akron - Wayne College

Classroom space and lab space (3) available are large enough for the class size of 18 and has more space if needed. Lab spaces never go over a 6:1 ratio of students to instructor ratio.

Each student lab space has adequate equipment to effectively train students, including: Suction equipment (powered and manual), cardiac monitor, backboard, cot with trauma mannequin, ACLS mannequin (can be defibrillated and intubated), CPR mannequin, gloves in all sizes, IV arm, radio, EMT supply bag, Paramedic supply bag, pediatric bag, drug box (stocked with demo-dose/fake medications comparable to what would be carried on an ambulance), airway mannequin(s) for intubation, 2 airway bags (intubation equipment), IO drill with supplies, adult and pediatric IO trainers, and oxygen administration equipment.

Advisory Board

The Paramedic Education Program's Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Ray Poynter	EMT-P	Vice President, J&C Ambulance
Lieutenant Steven Berry	NRP, RN	EMS Program Director, Akron Fire Department
Chief Chris Karakis	EMT-P	District Chief, EMS Bureau, Akron Fire Department
Tom Smoot		Director, Summit County EMA
Chief Steve Ionno	EMT-P	Barberton Fire Department
Captain Pat Bodnar	EMT-P	Canton Fire Department
Chief Dallas Terrell	NRP, OFC, OFO	Fire Chief, Wooster Twp. Fire Department
Ron Boldry		Akron Public Schools
Christopher Blake	BSN, RN, CFRN, NRP	Akron Children's Hospital
Heather Howley	PhD	Director of Regional Campuses, University of Akron Wayne College
Amy Haynes	BS	Director, Business Operations & Finance, University of Akron Wayne College
Diamond Miller	EMT	Student
Rosza Sykes	EMT	Student
Chanel Green	EMT	Student
Steph Fetsko	NRP	Graduate
Nate Yoder	NRP	Graduate
Aaron Gurley	NRP	Graduate

Katie Schildgen	NRP	Graduate
Matthew Miller	NRP	Graduate
Justin Heavelyn	NRP	Graduate
Michael Savetski	BSN, RN, EMT-P	EMS Emergency Management Coordinator, Cleveland Clinic
Crystel Smith	RN	Director of Nursing/Patient Services, Cleveland Clinic
Jonathan Sanchez	RN	Nurse Manager, Cleveland Clinic
Monica Nelson	RN	Nurse Manager ED, Cleveland Clinic
Brenda Johnson	BSN, RN	Nurse Manager ED, Cleveland Clinic
Shante Parnell	EMT-P	EMS Coordinator, Cleveland Clinic
Lesa Willoughby	BSN, RN	Nurse Manager, Cleveland Clinic
Mari Knettle	DPT, EdD, FASAHP	Dean, School of Health Professions, Cleveland Clinic
Michelle Hrehocik	MBA	Administrative Director, School of Health Professions, Cleveland Clinic
Titus Sheers	MD	Chairman of Medical Education, Cleveland Clinic
Cheryl Goliath	PhD	Executive Director, Medical Education, Cleveland Clinic
Steve Brooks	MD	Cleveland Clinic
Amy Raubenolt	MD, MPH	Medical Director, EMS Education, Cleveland Clinic
Hugh Dodd	RN, MSN	Manager, EMS Education, Cleveland Clinic
Cheryl Hardin		Administrative Assistant, EMS Education, Cleveland Clinic
Whitney LaBillois	EMT	Program Coordinator, EMS Education, Cleveland Clinic
Michael Fuller	BS, NREMT-P	PRN Instructor, EMS Education, Cleveland Clinic

Technical Standards

- Sensory and Motor Skills** - Students and candidates for program admission should be able to:
 - Move and transfer patients in a safe manner.
 - Move clinical equipment in a safe and controlled manner.
 - Demonstrate basic clinical skills related to the use of extracorporeal equipment, circuitry, and ancillary clinical patient care devices and equipment.
- Communication** - Students and candidates for program admission should be able to:
 - Possess excellent skills in the English.
 - Communicate clearly.
 - Produce and transmit patient information in oral and written format to members of the healthcare team.
 - Communicate with patients effectively with compassion and empathy.

- Possess demonstrated reading skills at a sufficient grade level to accomplish curricular requirements.
 - Provide effective care to patients.
3. **Intellectual** - Students and candidates for program admission should be able to:
 - a. Measure, calculate, interpret, analyze, question, compile and evaluate information from various modalities to effectively evaluate extracorporeal equipment and treat patients.
 - b. Comprehend spatial relationships of structures and models.
 - c. Comprehend relationships between patient care parameters and anticipate cause and effect responses based on their actions and inactions.
 - d. Learn through a variety of teaching modalities including classroom lecture, cooperative learning, small group activities, medical simulation and laboratory exercises, individual and group presentations, and the use of technology assisted learning.
 - e. Make rapid decisions in life threatening situations where problem solving and critical thinking are required.
 4. **Behavioral and Social Attributes** - Students and candidates for program admission should be able to:
 - a. Exercise good judgment, prompt completion of all responsibilities related to care of patients and participation on a patient care team.
 - b. Develop mature and effective relationships with co-workers and patients.
 - c. Perform problem solving skills in a timely manner.
 - d. Tolerate physically demanding workloads.
 - e. Function effectively under stress.
 - f. Adapt to changing environments, display flexibility, and learn to function in an environment of uncertainty inherent in the clinical practice of cardiovascular perfusion.
 - g. Practice in a safe manner.
 - h. Respond appropriately to emergencies.
 - i. Treat all patients, families, colleagues, and other members of the health care team with dignity and respect.
 - j. Demonstrate honesty, integrity, dedication, compassion and motivation.
 - k. Accept constructive criticism and respond appropriately with an acceptable modification of behavior.
 5. **Observation** - Students and candidates for program admission should be able to:
 - a. Comprehend information presented in images from paper and projections such as PowerPoint slides and video.
 - b. Observe laboratory, lecture and clinical demonstrations.
 - c. Observe patients and members of the healthcare team accurately at a distance and close.

Admissions Requirements

Applicants must meet the following minimum criteria to be considered for admission:

1. Minimum of 18 years of age.
2. Possess a high school diploma or equivalent (GED).
3. Maturity of judgment, good moral character, suitable health.
4. Valid Ohio driver's license.
5. Valid and non-expired American Heart Association (AHA) BLS Provider Certification card that covers the duration of the paramedic program.
6. EMT status:
 - Certification as EMT in the state of Ohio.
 - Out-of-state certified EMT must be state of Ohio certified.
 - It is the student's responsibility to maintain EMT certification during class.
 - Successful completion of Ohio Trauma Triage and Ohio Rescue Task Force Awareness training.

Application Process

Candidates must complete the following steps and meet the criteria below to apply:

1. Submit two letters of recommendation:
 - One from EMT instructor, if possible.
 - The other from a work supervisor, or someone who has known the applicant for at least two (2) years. If the applicant is currently enrolled in an EMT program, one letter of recommendation is requested from the EMT instructor.
2. Pass the pretest. Retesting of pre-entrance exam will not be allowed until the next paramedic class.
3. Provide official transcript showing successful completion (passing grade of C or higher) of an Anatomy and Physiology college level course prior to the start of class.
 - Failure to complete an Anatomy and Physiology college level course with a passing grade prior to the start of class will result in dismissal from the program.
4. Complete a personal interview by the Student Selection Committee.
5. Provide a copy of their resume/CV.
6. Be prepared to meet any additional unique requirements imposed by accrediting agencies.
7. Provide copy of Professional Medical Liability Insurance Waiver.
8. Have not been adjudicated mentally incompetent by a court of law.
9. Have not been convicted of or pled guilty to any of the following:
 - Felony;
 - Misdemeanor committed in the course of practice;
 - Misdemeanor involving moral turpitude

- Moral turpitude is defined as an act or behavior that gravely violates the sentiment or accepted standard of the community.
 - A violation of any federal, state, county, or municipal narcotics law;
 - Any act committed in another state or jurisdiction that, if committed in Ohio, would constitute a violation set forth in this paragraph.
10. Any student with a criminal record must submit a letter from the Ohio Division of EMS indicating that they are eligible to hold Ohio EMS certification.
 11. Does not engage in the illegal use of controlled substances, alcohol, or other habit-forming drugs or chemical substances while on or off duty as an emergency medical provider. Negative 10-Panel Toxicology Screen Results dated not more than 12 months prior to the start date of class is required with Immunization History Form. The 10 Panel Toxicology Screening must be from a certified CLIA laboratory (Cleveland Clinic Akron General Medical Center, etc).
 12. Has not committed fraud or material deception in applying for, or obtaining certificate issued under Chapter 4765 of the Ohio Administrative Code (OAC).
 13. Any unfavorable information obtained in background checks that has not been previously disclosed in writing will be grounds for immediate dismissal from the program and forfeiture of all tuition.
 14. Must provide copies of your NIMS 100 and 700 certifications prior to the start of class.

Any applicant providing the Paramedic Education Program with fraudulent information upon entrance or during the program will be dismissed from the Program and forfeit all tuition.

Additional Onboarding Compliance Policy

Some clinical, field, and academic partner sites have additional health or onboarding requirements (flu shots, COVID vaccinations, additional drug screens, background checks, etc.). When these are known in advance, the program will inform the student of any additional health requirements. However, during preparations for upcoming clinicals, the student is responsible for checking with the EMS Education Office to determine if there are any additional health or onboarding requirements. It is recommended that this process be initiated approximately 8-10 weeks prior to the start of the clinical to allow adequate time for completion of any additional health requirements. If the student does not complete the additional requirements required by the clinical or field site, the student is prohibited from attending that facility for their clinical or field education experience. All expenses incurred in meeting these additional health requirements are the responsibility of the student. Failure to meet these agency-specific requirements may prevent the student from completing the program's clinical requirements. Students that do not complete all portions of the program by the stated dateline will be dismissed from the program, unless alternative agreements are made between the student and the Program Manager or Program Director, as outlined in the Student Handbook.

Program Re-Admission Policy

Paramedic Education is a competency-based program in which mastery of all-content within the program including didactic, practical, and clinical components are considered the total educational experience. Failure of any of the components in part or as a whole indicates that the student has been unable to meet the program's minimum competency requirements. Any student academically dismissed from the program will have to repeat the entire course the next time they re-enroll. No credit will be given for past experience or hours within a preceding program or course.

Returning Student Policy

Previous admission to the EMS Education Program with subsequent withdrawal, failure, or dismissal does not assure a returning student a position in the next class. The application process, admission requirements, pretesting, and interview process must be completed to gain admission into future courses, unless otherwise approved by the Program Director.

Granting Credit for Previous Training

At the discretion of the program director, the following may be required if a student wishes to have course work waived based on transfer credit:

- Course description.
- Course objectives.
- Verification of completion of coursework from program official.
- Demonstration of proficiency by written and/or practical testing as determined by program staff.

If a student is a registered nurse, allied health professional, employee of a medical agency with expertise in a special area it may be possible to have course work waived. Approval by the Program Director is necessary once the information has been submitted. They must submit, in writing, the following:

1. Request for course work waived.
2. Verification from employer of current job description.
3. Copy of current R.N. license, ACLS, BCLS cards, or other documents as requested by the EMS Education Staff.

Graduation Requirements

This policy provides the student with guidelines regarding graduation requirements. All students must meet the following criteria for graduation:

- Pass all portions of the program written exams.
- Pass all portions of the program practical exam.
- Complete all clinical/ field requirements and required documentation.
- Overall grade average of 75% or higher in all phases of the program

Grading Scale

The Paramedic Education Program utilizes the following grading scale:

Scale	Grade	GPA	Definition
90-100%	A	4.0	Excellent
80-89%	B	3.0	Good
75-79%	C	2.0	Satisfactory
0-74%	F	0.0	Inadequate/Fail

The overall program grade is weighted based on the overall grade of each phase as outlined below:

Phase 1	20%
Phase 2	20%

Phase 3	20%
Phase 4	20%
Program Final	20%

Phase Grading

Each Phase will maintain a weighted grade based on the assignment type as listed below. Failure to complete a Pass/Fail section shall constitute academic failure of the phase and therefore the course. Please refer to the SAP policy for additional information.

Quizzes	7.5%
Homework	7.5%
Unit Tests	40%
Phase Final	45%
Assignments	Pass/Fail
Practical Testing	Pass/Fail
Clinical & Field	Pass/Fail
Affective Domain	Pass/Fail
Medication Math*	Pass/Fail (90% or higher to pass)

*Phase 1 Only

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Paramedic program will occur after the completion of the first, second, and third phases of the program. This will ensure Paramedic students are meeting the 75% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

Absences may be considered excused by the Program Manager or Program Director for extenuating circumstances to include but not limited to: death, significant illness or injury, or military leave. In the event an absence is excused, the student will be responsible for making up the missed material at the direction and guidelines set forth by the Program Manager or Program Director.

Class Attendance

1. No more than three (3) classes may be missed for each Phase of the program. A student who misses more than three (3) classes will meet with the Program Manager or Program Director to discuss the absences and face disciplinary action up to termination from the program.
 - a. Absences from the clinical and field setting will be included in this total.
2. A tardy is defined as any missed class time ranging from 1 – 59 minutes. This includes late

arrivals and early departures.

- a. To be considered on time for class, students must be physically present in their assigned seat when the class begins. Students who arrive exactly at the start of class time but are not ready for class to begin will be considered tardy.
3. Two (2) tardiness occurrences will equate to one (1) absence.
4. If a student is late to class (< 60 minutes), they will be marked tardy for that class. If a student is more than sixty (60) minutes late, zero attendance credit will be given for the class and the student will be marked absent.
5. If a student leaves a class early (< 60 minutes), they will be considered tardy for that class. If a student leaves a class more than 60 minutes early, zero attendance credit will be given for the class and the student will be marked absent.
6. It will be the student's responsibility to retrieve notes from the class. Make-up requirements will be at the discretion of the Program Manager or Program Director. Practical testing days; and scheduled certification courses are mandatory. Student will sign in on attendance sheet for each didactic/lab session.
7. A student who misses a class date with a quiz will not be permitted to make up the quiz and a zero (0) percent will be recorded. A missed test must be completed prior to the beginning of the next class or a zero (0) percent will be recorded.
8. If you are absent from class or clinical due to illness, the Program Manager or Program Director may request a doctor's note prior to returning to class or clinical based on your symptoms.
9. If you are absent from class or clinical due to a death in the family, the Program Manager or Program Director may request a funeral card or obituary prior to returning to class or clinical. If a student is found to be at or near dismissal criteria for attendance-related infractions (>3 absences/phase), the Program Director may allow for a student to complete "Program Service" in lieu of disciplinary action for attendance-related infractions, so long as all the following conditions or exemption are met:

Conditions:

- The student is in acceptable academic standing in the phase/course ($\geq 75\%$ overall)
- The student is in acceptable clinical standing in the phase/course
- The student is in the acceptable affective domain standing in the phase/course
- The student is not on a Performance Improvement Plan (PIP), nor on any level of program probation

Exemptions:

- The Program Director believes an extenuating circumstance exists that led to the attendance-related infractions.
 - a. Limited to a one-time exemption per student for the duration of the course, based on administrative discretion.

Clinical & Field Attendance

1. Students are expected to attend the entire duration of the clinical and/or field rotation as it was originally scheduled. Any student that is found to not have attended the entire duration of a clinical and/or field rotation shall be required to recomplete the specific rotation and original time.

The patient contacts, skills, hours and/or competencies from the original shift will not be calculated to the student's clinical/field progress in the program.

2. Any absences or tardiness occurrences in the clinical and/or field setting will follow the same rules as found under the "Class Attendance" section of this policy.

Clinical Attendance Policy

1. Students are expected to attend the entire duration of the clinical and/or field rotation as it was originally scheduled per Platinum Planner. Any student that is found to not have attended the entire duration of a clinical and/or field rotation may be subject to dismissal from the program. Should the student be permitted to remain in the program, the clinical shall be required to recomplete the specific rotation and original time. The patient contacts, skills, hours and/or competencies from the original shift will not be calculated to the student's phase or total clinical/field progress in the program.
2. The student clinical and field attendance policy reflects that of the classroom attendance policy.
3. Unexcused Absences
 - b. An unexcused absence will include the following examples and definitions:
 - i. A student who does not attend a clinical or field rotation as scheduled in Platinum Planner and does not have an excuse that was pre-approved by the Program Coordinator or Program Director.
4. Students will be able to schedule clinical rotations by utilizing Platinum Planner. Platinum Planner will be updated with available shifts by the Program Coordinator; it is important that students attend clinical rotations on the dates that they selected.
5. Clinical hours are sent and posted in each clinical/field area. All clinical rotations for the next month will close on the 22nd of the month before. *For example, all clinical rotations in October will close on September 22nd.* It is your responsibility to schedule your required clinical rotations prior to the 22nd of each month. Students who have to change or cancel a clinical time must also notify the Program Coordinator (leave necessary information on voicemail if after office hours).
6. Any changes or cancellations of clinicals must be made per the Platinum Planner. This will generate a request for approval of cancellation and/or change by the Program Coordinator. The Program Coordinator will either approve or deny cancellation or change.

Withdrawal Policy and Procedure

Students must submit written documentation in the form of a letter or e-mail of the intent to withdraw from the program. A "W" will be recorded on all withdrawals processed after the first week of class. Any withdrawals from a class must take place prior to the final exam in that class. Students who stop attending a course without submitting written documentation on their intent to withdraw will receive a "F" (failing) grade on their transcript.

Program Conferences

Mandatory Program Conferences will be scheduled in the middle of each phase. Students will meet with the Program Manager and the Program Coordinator to review each student's individual progress, both academically and clinically. Students who are behind will be counseled and may be placed on academic or clinical probation with a remediation plan to be followed by that student.

Failure to attend your scheduled program conference may be cause for disciplinary action up to dismissal from the program at the discretion of the Program Manager or Program Director.

Tuition and Fees

Course Tuition Schedule

Phase 1	\$2,200.00 - due first night of class
Phase 2	\$2,200.00 - due first night of class in Phase 2
Phase 3&4	<u>\$2,200.00 - due first night of class in Phase 3</u>
Total	\$6,600.00

1. Payment is due the first night of class for each phase. If you are unable to pay at this time, a written statement of why you cannot pay and how you plan to meet this obligation must be documented and given to the Program Manager or Program Director for approval before the first night of each phase. The program reserves the right to deny requested extensions.
2. If tuition is not paid and the reason for non-payment has not been documented in writing by the third (3rd) class session of each phase, the student will not be permitted to attend class or clinical sessions.
3. If full payment is not received by the fifth (5th) class session, the student will be dismissed from the program.
 - a. The exceptions to 2, 3, and 4 include those individuals whose tuition is being paid by city, township, private ambulance services, University of Akron Financial Assistance or by prior arrangement with the Program Manager or Program Director as outlined above in line "2".
4. Students whose tuition is paid for by someone else are encouraged to sign a "Consent for Release of Information" form. Form must indicate who is to receive information regarding their status. University of Akron Students must supply confirmation of UA admission and student ID number. This person(s) will be notified of the student's progress throughout the program including periodic grade updates, test or exam failures, and any disciplinary procedures
5. Tuition refund policy for student utilizing the GI Bill:

In the event that veterans or their eligible persons sponsored as students under Chapters 30, 32, 35, of Title 38 and Chapter 1606 or Title 10 U.S. Code, fail to enter the Program or withdraw or are discontinued therefrom at any time prior to completion, the amount charged for tuition, fees, and other charges shall not exceed the approximate pro rata portion of the total charges for tuition, fees and other charges that the length of the non-accredited program bears to its total length. A registration fee of \$10 need not be refundable: any amount beyond that is subject to proration and refund (CFR 21.4254 (C) (13)). The pro rata portion may not vary more than 10 percent of the total costs for tuition, fees, and other

Academic Calendar- Akron General

Date	Calendar Description
August 27, 2024	Phase 1 Begins
September 2, 2024	Labor Day – No Class or Clinical
September 12, 2024	Last Day to Receive 75% Tuition Refund
September 17, 2024	Constitution Day – Classes/Clinicals in Session
September 23, 2024	Last Day to Receive 50% Tuition Refund
October 9, 2024	Last Day to Receive 25% Tuition Refund
November 28-27, 2024	Thanksgiving Break – No Class or Clinical
December 14, 2024	Phase 1 Ends
December 17, 2024	Phase 2 Begins

December 25, 2024	Christmas Day – No Class or Clinical
December 27, 2024	Last Day to Receive 75% Tuition Refund
December 27, 2024 – January 1, 2025	Winter Break
January 2, 2025	Phase 2 Resumes
January 2, 2025	Last Day to Receive 50% Tuition Refund
January 12, 2025	Last Day to Receive 25% Tuition Refund
February 22, 2025	Phase 2 Ends

February 25, 2025	Phase 3 Begins
March 5, 2025	Last Day to Receive 75% Tuition Refund
March 11, 2025	Last Day to Receive 50% Tuition Refund
March 19, 2025	Last Day to Receive 25% Tuition Refund
April 23, 2025	Phase 3 Ends

April 29, 2025	Phase 4 Begins
May 29, 2025	Phase 4 Ends
May 31, 2025	Program Graduation

Academic Calendar – Wayne College

Date	Calendar Description
January 27, 2025	Phase 1 Begins
January 27, 2025	1/3 Tuition Payment Due
February 11, 2025	Last Day to Receive 75% Tuition Refund
February 22, 2025	Last Day to Receive 50% Tuition Refund
March 10, 2025	Last Day to Receive 25% Tuition Refund
May 13, 2025	Phase 1 Ends
May 19, 2025	Phase 2 Begins
May 19, 2025	1/3 Tuition Payment Due
May 26, 2025	Memorial Day -- No Class or Clinical
May 28, 2025	Last Day to Receive 75% Tuition Refund
June 4, 2025	Last Day to Receive 50% Tuition Refund
June 13, 2025	Last Day to Receive 25% Tuition Refund
July 4, 2025	Independence Day – No Class or Clinical
July 22, 2025	Phase 2 Ends
July 23, 2025 – August 3, 2025	Summer Break
August 4, 2025	Phase 3 Begins
August 4, 2025	1/3 Tuition Payment Due
August 12, 2025	Last Day to Receive 75% Tuition Refund
August 18, 2025	Last Day to Receive 50% Tuition Refund
August 27, 2025	Last Day to Receive 25% Tuition Refund
September 1, 2025	Labor Day – No Class or Clinicals
September 17, 2025	Constitution Day – Classes/Clinicals in Session
October 1, 2025	Phase 3 Ends

October 6, 2025
November 10, 2025
November 14, 2025

Phase 4 Begins
Phase 4 Ends
Program Graduation

Curriculum Outline

Phase I			Contact Hours		
Course	Course Title	Lecture	Lab	Clinical	Total
PAR100	Paramedic Phase I	115	84	128	327
PHASE TOTAL:					327
Phase II			Contact Hours		
Course	Course Title	Lecture	Lab	Clinical	Total
PAR200	Paramedic Phase II	67	60	126	253
PHASE TOTAL:					253
Phase III			Contact Hours		
Course	Course Title	Lecture	Lab	Clinical	Total
PAR300	Paramedic Phase III	68	32	122	222
PHASE TOTAL:					222
Phase IV			Contact Hours		
Course	Course Title	Lecture	Lab	Clinical	Total
PAR 400	Paramedic Phase IV	36	44	80	160
PHASE TOTAL:					160
TOTAL CLOCK HOURS					962

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9781284277517	Sanders' Paramedic Textbook + Navigate Online Access	Sanders & McKenna	6th	2024	Jones & Bartlett Learning
9781616697686	BLS Provider Manual (2020)	American Heart Association	2020 Guideline	2020	Channing-Bete
9781616694043	Advanced Cardiovascular Life Support (2020)	American Heart Association	2020 Guideline	2020	Channing-Bete
9781616697853	Pediatric Advanced Life Support (2020)	American Heart Association	2020 Guideline	2020	Channing-Bete
9780135379318	ITLS for Emergency Care Providers	Editors: Roy L. Alson, PhD, MD, FACEP Kye Han, MBBS, FRCS, FRCCEM	9th	2019	Pearson

		John E. Campbell, MD, FACEP			
9780132766289	Basic Arrhythmias	Gail Walraven	8th	2016	Pearson

Professional Appearance

Classroom, Clinical, Field Requirements

- Students are expected to wear their program uniform while participating in all course related activities. This includes classroom, lab, clinical, and field rotations.
- Students are provided with one (1) uniform polo. This polo is included in the tuition. Students may purchase additional uniforms from an approved vendor. This information will be included in the student's acceptance packet. Students are not permitted to purchase uniforms from an unauthorized vendor.
- The program uniform shall consist of the following:
 - Embroidered Polo
 - Black or navy dress pants. BDU-tactical or EMS pants are acceptable.
 - Plain black belt with traditional locking mechanism (no seatbelt style belts or decorative belt buckles are permitted)
 - Wristwatch (digital or analog). Smart watches are not permitted. The watch must be able to display a second hand or digital display.
 - A blue or black pen
 - A stethoscope. Students may elect to sign-out a stethoscope for the duration of the program. The student will be charged the cost of a replacement should they lose the stethoscope.
 - Black boots (for field rotations & lab sessions). Black tennis shoes (for clinical and classroom activities). Black tennis shoes must be all black and approved by the Program Director or Program Coordinator.
- Students must present in a neat and clean appearance at all times. Polo shirts must be tucked in, washed, and wrinkle free.
- Personal hygiene and appearance appropriate for a medical professional is expected (clean hair, body, hands, fingernails, and clothing). Beards and mustaches must be neatly trimmed. Hair, if colored, should be maintained in a natural tone. Perfumes and colognes are not to be worn. Exposed tattoos on the face, neck, and hands must be covered. The Program Director reserves the right to require arm tattoos be covered if deemed inappropriate, offensive, or distracting.
- Fingernails must be trimmed and clean. Any form of artificial nails is strictly prohibited per Cleveland Clinic Akron General Policy. Nail polish is permitted. If nail color is deemed to be inappropriate, offensive, or distracting, the Program Director reserves the right to require the polish be removed before returning to course related activities.
- Field shifts require black boots to be worn at all times, unless otherwise indicated by the field site. Students are permitted to wear black tennis shoes during in-hospital clinical rotations. The tennis shoes must be completely black and approved by the Program Director.
- CCAG Student ID Badges must be worn at all times (above the waist) by the student when they are functioning as a CCAG EMS Student. This includes classes, labs, and all clinical/field rotations. Students will not be allowed to participate in course activity without the proper identification.

9. Akron Children's Student ID Badge is to be worn in front of the Cleveland Clinic Akron General Student ID Badge while functioning as a Paramedic student at Akron Children's Hospital. Akron Children's ID Badges must be returned to Akron Children's Security Department or Cleveland Clinic Akron General EMS Education office at the time of completion of pediatric requirements or on the evening of program final.
10. No firearms, concealed weapons, or open carry weapons will be allowed in class or on any clinical rotation. No pocketknife (including a Leatherman like tool) can be worn at any time within any classroom, clinical, or field settings.
11. Hats are not to be worn in the classroom, laboratory, or clinical settings. Students may purchase a plain grey hat or cap for field rotations only. These must be approved by the Program Coordinator or Program Director.
12. If a student is associated with an EMS or fire-based service **that is sponsoring their tuition,** they may wear their department uniform (class B uniform shirt) during classroom, lab, and hospital clinical rotations. No department uniforms are to be worn during field rotations at any other EMS service except while at the sponsoring institution. (Example: Akron Fire students may wear their uniform for Cleveland Clinic Akron General ED or Akron Fire rotation but not while at Canton Fire).
13. The program will make reasonable accommodations for dress or grooming directly related to an employee's religion, ethnicity, or disability unless such accommodation poses a risk to the safety or health of the individual or others.
14. If a student is found to be in violation of this policy, they will be asked to leave the lecture, lab, clinical, or field rotation. They may return when back in uniform. Any time missed due to uniform infractions shall follow the attendance policy.

PHLEBOTOMY

<i>Program Snapshot: Phlebotomy</i>	
Program Director	Gerald Hicks, MBA, MLT (AMT), PBT (ASCP) ^{CM} hicksg@ccf.org
Location	2706 Franklin Blvd Cleveland, OH 44113
Clock Hours	240
Program Length	14 weeks / 3.5 months
Delivery Method	Residential
Total Cost (tuition + fees)	\$1,000

Overview

The Phlebotomy Program is a part-time (10-40 hours per week), 14-week program designed to train students who have received a high school diploma or GED. There are two cohorts each academic year a student can enroll in, one beginning in March and one beginning in August. Successful completion of the program results in a Certificate of Completion and allows a student to apply for phlebotomy certification from national certifying agencies.

Mission Statement

To provide the highest quality classroom and laboratory education preparing students to be proficient stewards in the field of phlebotomy.

Objectives

Behaviors demonstrated by students are expected through their course of training and as they assume a role in the clinical laboratory as a phlebotomist.

Ethical behavior – Students conduct themselves with honor and do not cheat or falsify academic information or laboratory data at any time

Respect – students make every effort to maintain effective relationships and communication with their peers, instructors and laboratory staff

Diligence – Students strive to be on time, prepare daily, complete assignments and apply themselves to study

Knowledge – Students assimilate the knowledge required to achieve competency as a phlebotomist

Integrity – Students follow required lab practices and maintain an organized work space

Judgment – Students exercise their best judgment in analysis and problem-solving

Competency – Students sustain grades to remain in good standing in the program

Quality – Students are mindful that quality in all phases of school or work is essential and is foundational to accurate diagnostics and the best patient care

Certification – Students pass a certification examination on completion of studies and maintain certification throughout their career

Continuous learning – Students commit to the personal responsibility of keeping abreast of new information and practice

Upon successful completion of the Phlebotomy Program, the graduate will be able to:

- Demonstrates the concepts of communications involving both personal and patient interaction. Communicate ideas effectively in oral and written form; use electronic methods to communicate, collaborate and disseminate information.
- Perform proper infection control techniques and safety measures to protect patient, co-workers and community
- Apply knowledge of the anatomy and physiology of body systems and medical terminology in relation to general pathologic conditions associates with the body systems. Apply disease states and conditions in relation to specimen collection for clinical lab testing.
- Demonstrate proper techniques using appropriate equipment to perform venipuncture and capillary puncture while maintaining quality assurance during and after specimen collection.
- Demonstrate proper techniques using appropriate equipment to perform specimen processing while maintaining specimen integrity.
- Explain and apply appropriate functions of Point of Care Testing.
- Demonstrate a professional attitude in all interactions, maintain a willingness and enthusiasm to learn and accept instruction and suggestions in a positive, constructive manner, and continue to develop themselves professionally.
- Practice medical and professional ethics and apply the understanding of legal implications involving phlebotomy practice.
- Meet eligibility requirements to sit for American Society for Clinical Pathology (ASCP) Board of Registry Examination or equivalent

Accreditation

The Phlebotomy Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences. (NAACLS).

National Accrediting Agency for Clinical Sciences (NAACLS)
5600 N. River Road. Suite 720
Rosemont, IL, 60018
773 714-8880
www.naacls.org

State Approval

The Phlebotomy Program is approved and registered by the Ohio State Board of Career Colleges and Schools in accordance with Ohio Revised Code Chapter 3332 (School Registration No. 2165).

Ohio State Board of Career Colleges and Schools
30 E Broad St Suite 2481

Columbus, OH 43215
614 466-2752
Scr.ohio.gov

Faculty

Gerald Hicks, MBA, MLT(AMT), PBT(ASCP)^{CM}, Program Director (full-time)

Education: A.S., General Science, Lorain County Community College
B.S., Applied Science, Allied Health, Youngstown State University
MBA, Business Administration, University of Northwestern Ohio

Phone: 216.372.6861

Email: hicksg@ccf.org

Facilities

The Phlebotomy Program has a space that is 7700sq. ft. which provides space for both a classroom for learning, as well as a lab space to help students develop their phlebotomy skills. This classroom space contains 12 computers accessible to the students. The lab also contains all of the phlebotomy equipment, drawing chairs, phlebotomy arms, training devices needed to enhance phlebotomy education. In the clinical portion, they are integrated into the daily workflows with the preceptors in the phlebotomy areas and get experience on all of the processes and any equipment used in these areas.

Advisory Board

The Phlebotomy Program's Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member Name	Credentials	Role
Gerald Hicks	MBA, MLT (AMT) PBT(ASCP) ^{CM}	Program Director, Cleveland Clinic
Sean Williamson	MD	Medical Director, Cleveland Clinic
Teresa Dunca	MA, CMAA	Program Coordinator, Health Professions, Cleveland Clinic
Sarah Cihlar	MBA	FHC Lab Manager, Cleveland Clinic
RaeQuel Edgerso	MSM	Community Representative, Pretorian Labs (in-field specialist)
Lori Dickens-Smith	CPT(NHA)	Academic Representative, Polaris (in-field specialist)

Maxine Ratcliff-Johnson,	BS, PBT(ASCP) ^{CM}	Program Director, Pathology Education (Pre-Analytics), Cleveland Clinic
Celeste Dean-El	MS, BB(ASCP) ^{CM} , SBB(ASCP) ^{CM}	External Employer, American Red Cross (in-field specialist)
Brenda Berman	MS, MLS(ASCP) ^{CM}	Academic Representative, Lorain County Community College (in-field specialist)

Technical Standards

Physical and Motor Skills

Students must:

- Have fine motor dexterity to collect patient samples, use a microscope, and operate and repair laboratory equipment
- Have gross motor dexterity to process samples, physical mobility to collect blood specimens from patients, and stamina to tolerate a physically demanding workload
- Be able to stand for long periods of time and maneuver through crowded spaces to collect specimens

Sensory/Observational Skills

Students must:

- Be able to participate in lab and clinical practical demonstrations
- Have visual acuity sufficient to distinguish red, yellow, and blue colors; distinguish clear from cloudy; distinguish objects through a microscope.
- Be able to view computer screens for extended lengths of time

Communication Skills

Students must:

- Be able to communicate in English, both verbally and in writing to all staff, employees, students, patients and other healthcare workers
- Be able to complete written assignments and participate in classroom discussions

Intellectual and Qualitative Skills

Students must:

- Have the ability to organize their work, solve problems, think critically, and make appropriate judgments

Professionalism and Social Behavior

Students must:

- Have the ability to follow directions, manage time, and meet deadlines
- Be able to function as part of a team and act as a professional
- Have the ability to work under pressure, maintaining a calm demeanor and demonstrating maturity

- Be able to adhere to the regulations of accrediting agencies, comply with safety regulations of the laboratory and maintain a safe environment for themselves and others
- Be able to act as a professional by wearing appropriate dress, using proper behavior and maintaining personal honesty and integrity.
- Be able to demonstrate the emotional health required for full utilization of the applicant's intellectual abilities.
- Be able to recognize emergency situations and take appropriate actions.

Admissions Requirements

The Phlebotomy Program seeks student applicants who match personal attributes with those required for practice of phlebotomy.

Applicants must demonstrate a capacity for academic achievement:

1. High School Diploma or GED
2. Minimum high school GPA of 2.5 or previous college course work

Applicants where English is their second language must have a TOEFL score of 70 for program acceptance.

Desirable Attributes of Applicants:

- Logical thought processes facilitating problem solving
- Strong oral and written communication skills
- Dependability and a sense of responsibility
- Courtesy and respect in personal relationships
- Internal motivation
- Integrity
- Maturity
- Interests or hobbies that enrich personal satisfaction
- Ability to follow directions
- Ability to react appropriately and to maintain poise and control under stressful conditions
- Manual dexterity

Application Process

- Application materials:
 - Application through Campus Café system
 - Official transcripts from high school and all colleges/universities attended
 - Current resume (optional)
 - Essential Functions acknowledgement
- Applicants meeting the minimum criteria *may* be contacted to make an appointment for a personal interview. Please note that meeting the minimum criteria does not guarantee an interview.
- If you are contacted, a personal face-to-face onsite interview is preferred, phone or virtual interviews will be considered. Exceptions may be made under some circumstances. This will be decided by the Program Director on a case-by-case basis.
- Letters of Recommendation are not required, but will be accepted. Letters will be reviewed prior to selecting a candidate for an interview. They are not considered in the overall scoring of the applicant.
- It is the responsibility of the applicant to see that deadline for submitting applications and other application materials is met.

- After the interview, each applicant who has completed the process will be scored on non-academic characteristics, using information gathered from the application form and interview.
- Acceptable applicants will be ranked and selected in order of their total overall scores.
- Deadlines:
 - For March start, the deadline is January 15th
 - For August start, the deadline is June 30th

Graduation Requirements

Acceptable performance in all courses must be achieved in order to complete the program. A student must complete the entire program to be eligible to sit for any certification examination. This includes satisfactory academic and laboratory performance along with satisfactory completion of the comprehensive final examinations. Criteria for acceptable performance are determined by the student's performance throughout the entire program. The criteria are outlined in the Student Academic Standards section of this handbook.

Successful completion of the program entitles the graduate to a Certificate of Completion from the Phlebotomy Program. The Certificate of Completion allows a student to apply for phlebotomy certification from national certifying agencies. Passing a national certification exam is not required for a Certificate of Completion from the Phlebotomy Program.

There is no option in this program for advanced placement to bypass any coursework. Because Cleveland Clinic is not a degree granting institution, the credits earned in this program cannot transfer to any other institution. This is a noncredit granting program. All coursework and learning experiences must be completed during the program. For this reason, students cannot earn credit for experiential learning, even if they have experience working as a phlebotomist.

Certification Exams

Graduates are eligible to sit for certification examinations given by the Board of Certification (BOC) of the American Society of Clinical Pathologists (ASCP).

The ASCP BOC certification examination is given throughout the year. The BOC is the oldest and largest certification agency for laboratory professionals having certified more than 560,000 individuals since its establishment. It has become the gold standard for certification of medical laboratory personnel. Detailed information regarding application, eligibility and testing sites can be found on the ASCP website at www.ascp.org.

Grading Scale

Scale	Grade	GPA	Definition
90-100%	A	4.0	Excellent
80-89%	B	3.0	Good
70-79%	C	2.0	Satisfactory
0-69%	F	0.0	Inadequate/Fail

Course grades are determined by an average of the exam/quiz grades and lab grades.

- If a student scores below a 70% on any exam (written or practical), the exam is considered unsatisfactory.
- Students are required to complete all exams. No extra credit will be given to increase the overall exam grade.

Withdrawal Policy

A student may withdraw from the Phlebotomy Program at any time. A written letter of intent indicating the anticipated date of withdrawal must be submitted to the Program Director. The reason for the withdrawal is not required. Once the letter of intent is received by the School, the Program Director will set up a meeting with the student to discuss the withdrawal.

The withdrawing student is responsible for returning any borrowed reference materials belonging to the School. The student must surrender their temporary ID badge prior to departure on the last day. There will be no reimbursement for any expenses incurred as a result of being in the Program. There will be no refund of tuition after the sixth week of the program. Students will be responsible for all monies owed for withdrawing after the sixth week of the program.

The student will be asked to complete a final program evaluation prior to departure.

Students withdrawing from the program prior to week seven of the academic session will be considered withdrawn. Students withdrawing after week seven of the academic session will be counted as incomplete and will be included in the published outcomes measures according to NAACLS Standards.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Phlebotomy Program will occur during and after the completion of the program. This will ensure Phlebotomy students are meeting the 70% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

Students are expected to be in attendance Monday and Thursday from 10am – 2:30pm

- **Exceptions:** Some laboratory areas may require a start time of 7:00 am or evening hours for clinical experience.
- **Lunch:** There is a 30 minute lunch break during the 10 week didactic session. A lunch break will be provided during clinical experience. Students are expected to follow the schedule of their preceptor.
- **Breaks:** Additional breaks throughout the day will change based on whether the student is in the didactic or clinical experience portion or the semester. Breaks are not guaranteed and are dependent on the learning activities for the day.
- **Staying Late:** Some laboratory work may require staying beyond to complete the laboratory work or assignment.

Expectations

Phlebotomy students are training to become professionals. It is, therefore, reasonable to expect each student be in attendance 8 hours per week during lecture/lab sessions and 40 hours for clinical experience. The idea is for student to start developing attitudes, habits, and characteristic of professionals. Maintaining a stable and reliable work force is critical to the effective and efficient delivery of health care services. Excessive tardiness and absenteeism negatively affect patient care and employee morale and are considered unacceptable.

A student's general attitude, attendance record, and promptness are heavily considered when judging dependability and willingness to accept responsibility. It is anticipated that a student will want to seek employment at the Cleveland Clinic when training is completed and the impression they make on the staff and employees in various departmental rotations will be taken into consideration when hiring decisions are made. In any case, attendance is an important consideration wherever one may seek employment.

It is the responsibility of the Phlebotomy student to:

- Attend ALL scheduled lecture and laboratory sessions, arriving on time and demonstrating respect for the speaker/instructor and an interest in the material being presented. All learning activities are mandatory, unless the program director decides otherwise.
- Prepare ahead of time for every lab or lecture. Most course materials are online and students are expected to maximize class time by reviewing and learning the material prior to the lecture/lab.
- Use any spare time during the scheduled day working on assigned projects or studying, without the expectation of regular time out of the laboratory for this activity.
- Be in attendance AND available between the scheduled hours of class periods every day
- Be patient and flexible, remembering patients first. An instructor may be immersed in patient work and unavailable to work with students at the exact time noted on the class schedule. Students are encouraged to assist with the task at hand, if possible.
- Make a reasonable attempt to report as scheduled despite inclement weather conditions.
- Be available at all times during the day. Breaks are not to be used for activities that should be done on personal time such as going to the gym.

All hours of attendance are tracked by the Program Director. Manual attendance sheets are used. It is the student's responsibility to sign the class attendance for that given day. All attendance time is reconciled by the program director.

Absences are classified as Excused, Unexcused, or Tardy/Leave Early. Students must send an **EMAIL** to the Program Director at least one hour prior to the designated start time to report an absence. Habitual or excessive absences may result in a grade of Incomplete for the clinical section rotation and progressive disciplinary action. **Text messages are not acceptable notification.** If a text message is received, the time will be counted as unexcused.

Personal Time off (PTO)

- 8 hours of PTO will be allowed each academic session for illness, emergent or personal situations.
- If more than 8 hours are used in an academic session, each hour that was missed will need to be made up by the student.

Excused Absences

- Illness
 - Taking time off for an illness WILL count against the PTO allotment.
 - If the student will be out for more than 2 days in lecture or clinical experience (using greater than 8 hours PTO) due to illness, a doctor's note will be required to be submitted upon the student's return. This will still count against the PTO allotment.
 - If a student comes in when sick (fever, cough, etc.) and is sent home, they will forfeit the PTO for the day. Cleveland Clinic and the Phlebotomy program strongly suggest that employees and/or students do not come into their facilities while sick to prevent the spread of illness to patients or other caregivers.
- Early dismissal/day off approved by Program Director or designee – will NOT count against the PTO allotment.
- HR appointments
- Time off for non-Cleveland Clinic employment issues is counted against the PTO allotment.

Unexcused Absences

- Any absence not listed above
- Failure to comply with the one-hour call in/email requirement
- Any unexcused PTO will be counted against the students' Professionalism grade.

Each occurrence of unexcused absence will result in progressive disciplinary action leading up to program dismissal.

Tardy/Leave Early

- Tardy – arriving after set class time. If a student arrives more than 8 minutes late, they will be penalized with a tardy AND will have to use their PTO for the balance of missed time.
- Leave Early -- leaving more than 15 minutes prior to the scheduled end time.

Any deviation from these rules is solely at the discretion of the Program Director.

Spare Time

Students should not expect to be scheduled additional study time during the clinical experience part of each semester. If the laboratory work is slow or the instructor is busy and unable to work with the student, the student is expected to use this time for studying. There are several areas where this may be done:

- A designated area in the laboratory as identified by the LES/Program Director
- Huddle rooms or conference room
- The LES/Program Director, or preceptor must be aware of the student's study location at all times so they can be located when needed.

Spare time is not to be used for sleeping, watching videos, viewing non-laboratory related websites, going to the on-site gym or any other non-laboratory related activities. Students that are caught doing non-laboratory related activities during working hours will be given one verbal warning to discontinue that activity. Subsequent findings of inappropriate behavior will result in progressive disciplinary action.

Tuition and Fees

Tuition for the program is \$1,000. The cost of books, health insurance, and living expenses is paid by the student. All textbooks, notebooks, school supplies, are provided by the program. Two sets of scrubs are provided to the student upon completion of the program. ASCP certification fees are provided by the program.

Additional Expenses

- Medical insurance
- Vaccinations or lab tests proving immunity a year

Academic Calendar

Date	Calendar Description
March 2, 2025	Full Tuition Due
March 3, 2025	Spring Academic Session Begins
March 17, 2025	Last Day to Receive 75% Tuition Refund
March 26, 2025	Last Day to Receive 50% Tuition Refund
April 10, 2025	Last Day to Receive 25% Tuition Refund
May 9, 2025	End of Didactic Session
May 12, 2025	Start of Clinical Experience
May 26, 2025	Memorial Day – No Class or Clinicals

June 6, 2025	End of Academic Session
August 1, 2025	Full Tuition Due
August 2, 2025	Fall Academic Session Begins
August 20, 2025	Last Day to Receive 75% Tuition Refund
September 1, 2025	Labor Day – No Class or Clinicals
September 2, 2025	Last Day to Receive 50% Tuition Refund
September 17, 2025	Constitution Day – Classes/Clinicals in Session
September 21, 2025	Last Day to Receive 25% Tuition Refund
October 6-10, 2025	Fall Break -- No Class or Clinicals
November 7, 2025	End of Didactic Session
November 10, 2025	Start of Clinical Experience
December 5, 2025	End of Academic Session
March 1, 2026	Full Tuition Due
March 2, 2026	Spring Academic Session Begins
March 16, 2026	Last Day to Receive 75% Tuition Refund
March 26, 2026	Last Day to Receive 50% Tuition Refund
April 9, 2026	Last Day to Receive 25% Tuition Refund
May 8, 2026	End of Didactic Session
May 11, 2026	Start of Clinical Experience
May 25, 2026	Memorial Day -- No Class or Clinical
June 6, 2026	End of Academic Session
August 23, 2026	Full Tuition Due
August 24, 2026	Fall Academic Session Begins
September 7, 2026	Labor Day – No Class or Clinicals
September 8, 2026	Last Day to Receive 75% Tuition Refund
September 17, 2026	Constitution Day – Classes/Clinicals in Session
September 18, 2026	Last Day to Receive 50% Tuition Refund
October 3, 2026	Last Day to Receive 25% Tuition Refund
October 6-10, 2026	Fall Break -- No Class or Clinical
November 6, 2026	End of Didactic Session
November 9, 2026	Start of Clinical Experience
December 4, 2026	End of Academic Session

Curriculum Outline

Didactic Schedule

PHB2001 – Phlebotomy

Clock Hours: 80

Weeks 1-8

	Monday	Thursday
Lecture	10:00 AM - 12:00 PM	10:00 AM -12:00 PM
Lab	12:30 PM - 2:30 PM	12:30 PM - 2:30 PM

Clinical Schedule

PHB2003 – Phlebotomy Clinical (Experience)

Clock Hours: 160

Weeks 9-12

	Monday - Friday
Clinical Experience	8:00 AM – 4:30 PM

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9781284209945	Phlebotomy Essentials	McCall, R.	7th	2020	Jones & Bartlett Learning
9781496399878	Student Workbook for Phlebotomy Essential	McCall, R.	7th		Jones & Bartlett Learning

Reference materials are in the Administrative Area (Program Director Office).

- School textbooks and study materials are not taken into laboratory work areas to prevent contamination.
- They may be used in libraries or conference rooms but are not to be left in these areas.
- Reference books may be borrowed overnight or for the weekend.
- Program materials and texts used for weekly exams are to be returned on the day of the exam
- Books should not be written in or marked in any way as they are used by all students.

Professional Appearance

Scrubs must be worn on a regular basis and must be gray or red.

PRIMARY MAGNETIC RESONANCE IMAGING

<i>Program Snapshot: Primary MRI</i>	
Program Director	Halley Majersky, MEd, R.T. (R)(M)(CT)(MR) majersh@ccf.org
Location	CCAC – Building 2 25900 Science Park Drive Beachwood, OH 44122
Clock Hours	1776
Program Length	64 weeks / 16 months
Delivery Method	Residential
Total Cost (tuition + fees)	\$14,070

Overview

The Primary Magnetic Resonance Imaging (MRI) is a 16-month (4 semesters) certificate-level designed to prepare students for a career as an MRI technologist. Unlike the Post-Primary MRI Program, applicants are not required to be ARRT registered, but must possess a minimum of an Associate's degree. Successful completion of the program makes students eligible for the ARRT Examination.

Mission Statement

To develop exceptional imaging professionals who meet the needs of the community and provide a foundation for lifelong learning.

Objectives

Goal #1: The student / graduate will be clinically competent.

Outcomes:

- Student will complete required competencies.
- Student will perform exams safely.
- Student will produce quality diagnostic images.

Goal #2: The student / graduate will demonstrate professionalism.

Outcomes:

- Student will participate in continuing education meetings.
- Student will engage in activities within professional organizations.
- Student will demonstrate professional behaviors.

Goal #3: The student / graduate will demonstrate effective critical thinking.

Outcomes:

- Student will be able to modify routine procedures for non-routine patients.
- Student will effectively critique images to determine if corrective action is required.

Goal #4: The student / graduate will demonstrate effective communication.

Outcomes:

- The student will demonstrate effective written communication.
- The student will demonstrate professional verbal communication in the healthcare environment.

Accreditation

Programmatic Accreditation

The Primary MRI Program is accredited by the Joint Review committee on Education in Radiologic Technology:

Joint Review Committee on Education in Radiologic Technology (JR-CERT)
20 N. Wacker Drive, Suite 2850
Chicago, IL, 60606-3182
(312) 704-5300

State Approval

The Primary MRI Program is approved and registered by the Ohio State Board of Career Colleges and Schools in accordance with Ohio Revised Code Chapter 3332 (School Registration No. 2165).

Ohio State Board of Career Colleges and Schools
30 E Broad St Suite 2481
Columbus, OH 43215
614 466-2752
Scr.ohio.gov

Faculty

Halley Majersky, MEd, R.T. (R)(M)(CT)(MR), Program Director (full-time)

Education: Certificate, Radiology, Trumbull Memorial Hospital School of RT
B.S., Computed Tomography, Kent State University
M.S., Adult Education, Cleveland State University

Phone: 216-212-0484

Email: majersh@ccf.org

Kimberly Saghy, BA.S., R.T.(R)(CT)(MR)MRSO, CT/MRI Instructor (full-time)

Education: Certificate, Adult Education, Cleveland State University
A.A.S., Radiography, Lorain County Community College
B.S., Healthcare Management, Youngstown State University

Phone: 216-554-3375

Email: saghyk@ccf.org

Gabriel Kroupa, MPH, (NM)(MR)(MRSO, MRI/RT Instructor (full-time)

Education: Certificate, Magnetic Resonance Imaging, Cleveland Clinic School of Diagnostic Imaging
B.S., Nuclear Medicine, University of Findlay

Facilities

The Primary Magnetic Resonance Imaging Program has sufficient current classroom and office space available to meet the needs of students. A classroom is available for didactic courses to be held and for students to use for study purposes. The program does not require laboratory space.

The program's equipment and supplies are readily available to support the delivery of the program curriculum, including adequate instructional equipment, laboratory supplies, and storage. Students have access to computers with internet and intranet and can access MyLearning and Trajecsyst.

Advisory Board

The Primary Magnetic Resonance Imaging Program's Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Joe Parker	BA	Diagnostic Services Institute, Cleveland Clinic
Mark Moore	RT(R)	Education Coordinator, Cleveland Clinic
Mari Knettle	DPT, EdD, FASAHP	Dean, School of Health Professions, Cleveland Clinic
Halley Majersky	MEd RT(R)(M)(CT)(MR)	Program Director, Cleveland Clinic
Kim Saghy	BS RT(R)(CT)(MR)MRSO	Instructor, Computed Tomography and Magnetic Resonance Imaging Programs, Cleveland Clinic
Christine Clark	RT(R)	Director of Imaging, Cleveland Clinic
Christine DeCorte	RT(R)	Director of Imaging, Cleveland Clinic
Rick White	RT(R)	Director of Radiology, Cleveland Clinic
Mark Puletti	RT(R)	Clinical Manager, Cleveland Clinic
Christopher White	RT(R)	Clinical Manager, Cleveland Clinic
Scott Berg	RT(R)	Director of Imaging, Cleveland

		Clinic
Tera Munaretto	ARDMS	Director Radiology Services, Cleveland Clinic
Starla Paige	RT(R)	Director of Imaging, Cleveland Clinic
Cynthia Lewis	RT(R)	Director of Imaging, Cleveland Clinic
Melanie Huth	RT(R)	Clinical Manager, , Cleveland Clinic
Scott Klammer	RT(R)	Director of Imaging Services, Cleveland Clinic
Donna Lancaster	BS, RT(R)(CT)(MR)	Senior Multi-modality Technologist, Southwest General Hospital

Technical Standards

To be success in the Primary MRI Program, applicants and current students must meet the following technical standards:

- Candidates must have good eyesight either naturally or through correction. They must be able to see the printed words in a textbook and be able to read and accurately interpret the numbers on a radiographic technique chart.
- Candidates must have the ability to hear instructions and be able to respond to verbal requests by patients/customers.
- Candidates must be able to lift a minimum of thirty (30) pounds and possess the ability to support up to 175 pounds. MRI technologists must assist, support and move patients from wheelchairs and carts onto examination tables which requires the use of their backs and muscles.
- MRI technologists must verbally instruct patients and be able to express concern and empathy for them. Candidates must possess good verbal and nonverbal communications skills as evidenced from the application and interview process. MRI technologists must perform data entry with dexterity and accuracy.
- Students must be physically and mentally capable of fulfilling the objectives of the Primary MRI Program. The school will make reasonable accommodations to assist a student with a disability to advance through the program. Students must have sensory function adequate for patient assessment and care. They must possess the physical status needed to provide all aspects of care in a safe manner. (Please see Special Accommodations for Students with Disabilities Policy).

Admissions Requirements

Applicants to the Primary Magnetic Resonance Imaging Program must meet the following requirements:

1. Candidates must be high school graduates or earned a certificate of equivalent education recognized by the U.S. Department of Education.
2. If a student has completed high school in another country, the student must submit an official translated transcript.
3. Foreign transcripts must be evaluated by the National Association of Credential Evaluation Services (NACES). It can be any transcript

- evaluation service.
4. All candidates must satisfy the following minimum requirements:
 - All courses must be college credit courses and will only be accepted with a “C” grade or better while maintaining a minimum GPA of 2.5 from a regionally accredited college and have a traditional letter grade. The Primary MRI program does not accept the pass/no pass grading option.
 - Anatomy & Physiology I & II (To have been completed within the last 5 years)
 - Medical Terminology
 5. Eight (8) hours of clinical observation must be completed within the first 8 weeks of the program.

Application Process

The Primary MRI Program uses a selective process to determine which students will be accepted into the program. Acceptance into the program is based on a point system that includes scores from a behavior-based interview, high school and college GPAs, and the number of additional science and math classes with a grade of "C" or better. The higher the grade on the science and math courses, the more points awarded.

To apply, all candidates must submit the following:

- Complete and submit an application form with payment of a non-refundable \$20.00 application fee. Application forms may be downloaded from the website.
- Send official high school transcripts or GED and college transcripts to the School of Health Professions Registrar's office.
- Candidates are encouraged to submit the previous documents by February 1st or until the program has sufficient applications that meet the requirements.

Candidates must also meet the following criteria as part of the admissions process:

- Candidates may be considered who meet most of the requirements if there is evidence that they will meet the requirements prior to the beginning of the program.
- Candidates are required to provide proof of health insurance and current certification in Basic Life Support for Health Care Providers from the American Heart Association.
- Candidates must pass a criminal background check. If a candidate does not pass the criminal background check, they will not be permitted to continue in the program.
- Candidates accepted into the program must submit a \$300 non-refundable tuition deposit which is applied to the first semester tuition.
- All qualified candidates must participate in a behavior-based interview by the members of the selection committee after completing the application process.
- The Primary MRI Program does not accept advanced placement, transfer students, and also, may or may not transfer credits from any college or Primary MRI Program.

Applications will be accepted through the Campus Café system.

Graduation Requirements

All students must meet the following criteria for graduation. Students graduate from the program with a

certificate in Primary Magnetic Resonance Imaging after completing 4 semesters of education.

Criteria

- Satisfactory completion of all program courses.
- All competencies must be completed as outlined in the Competency Examination Policy.
- All ARRT mandatory and elective competencies must be completed.
- All ARRT general patient care procedures must be completed.
- All regular and make-up hours must be completed.
- Tuition and fees must be paid in full.
- All reference books or other material must be returned.
- Formal venipuncture class must be satisfactorily completed.
- Graduation survey must be completed.
- Employer release form must be signed.
- All ID badges must be returned, or fee must be paid prior to graduation.
- Satisfactorily write a short paper on professionalism.

Grading Scale

The following grading scale is used:

Scale	Grade	GPA	Definition
93-100%	A	4.0	Excellent
84-92%	B	3.0	Good
*75-83%	C	2.0	Satisfactory
67-74%	D	1.0	Unsatisfactory
66-0%	F	0.0	Inadequate/Fail

Students must maintain a "C" grade or better in each academic and clinical course in the Primary MRI Program. Students not satisfying this minimal academic requirement will be dismissed from the program. If a student does not complete all required course assignments by the end of the semester, they will receive an incomplete grade. Incompletes must be resolved within 5 weeks into the next semester or the grades converts to an "F", or failing grade.

Students are counseled as needed throughout the semester regarding academic grades, clinical grades, attendance, tardiness, evaluations, semester GPA, cumulative GPA, and other pertinent information regarding student progress.

Course grades are reviewed by the instructor and students are counseled as needed throughout the semester. At mid-semester the program director identifies students who are at risk of not passing a class and sends an email for them to meet and discuss what approach to take to improve the grade. Students who are dismissed for academic reasons may utilize the Grievance Procedure Policy.

Clinical Grade Purpose

Students will be given an established number of points for each clinical experience. Each semester clinical grade will be determined by:

1. The number of evaluations turned in by the end of the semester. Four points will be deducted from the established number of clinical points for each missing evaluation.
2. The number of competency evaluations completed by the end of the semester. Eight points will be deducted each week that the competencies are not turned in.

3. The number of failed competency examinations each semester as outlined in the Competency Examination Policy.
4. Observance of program and department policies and practices. Each corrective action will deduct eight points.
5. Only one student clinical evaluation per two-week rotation will be accepted.

Clinical evaluations are reviewed when received by the coordinator. The coordinator meets privately with each student who has a score of 2 or less or there are comments on the evaluation that need to be discussed.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Primary MRI program will occur after the completion of the first, second, and third semesters of the program. This will ensure Primary MRI students are meeting the 75% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

This policy establishes standards of appropriate attendance, provides a procedure for notification of absence and tardiness, and establishes guidelines for the discipline and improvement of substandard attendance and tardiness.

The ethics and attitudes developed through adherence to this policy will help ensure student success in the future, regardless of their place of employment. Excessive tardiness or absenteeism negatively affects patient care and hospital morale and is therefore unacceptable. Failure to comply with these policies will result in corrective action based on a point system, up to and including expulsion from the program as outlined in this policy and the Corrective Action Policy. **Please note: records of attendance and corrective action are retained for a period of seven (7) years after graduation and are reviewable for matters pertaining to employment references, dismissal and reinstatement after dismissal.**

General Attendance and Timeliness

All time off must be approved by program officials. It is the responsibility of each student to be accountable to the faculty of the school and the clinical instructors at each clinical site. Please use the following guide for informing the school faculty of any changes to your schedule. Depending on the circumstances, corrective action may result. Please see LACK OF WORK in this policy and refer to the Corrective Action Policy for more detail.

Attendance Notification

- If a student is unable to attend class or clinical, students must text and email program faculty by 7:00am, please leave the reason for the absence. If it is a clinical day, the site must be notified with a phone call.
- If a student is running late to class or clinical (include an estimated time of arrival).
- If a student is told to leave clinical for lack of work, documentation is required from clinical preceptor.
- If a student wants to use PTO in the morning, it must be requested **before midnight the night before**, or the student will be considered tardy.

Attendance Book (after approval by a faculty member)

- If a student knows ahead of time PTO will be used for all or part of the day.
- If a student knows ahead of time of an absence from class or clinical.
- If there is any change to the schedule.

Call Faculty for Permission

- If a student unexpectedly needs to leave clinical early.

Class/Lab Specific Attendance

8:00 am – 3:30 pm.

Regular and prompt attendance for Primary MRI courses and labs is essential for students to meet the educational challenges and to accomplish learning outcomes of the program. Due to the progressive nature of the individual courses and the program, attendance and punctuality are seen as essential qualities. All classes and labs will begin as scheduled. Please allow for weather, traffic and other circumstances that may cause a delay.

1. Students must clock in and out in upon arrival and departure from the classroom/lab.
2. Students are expected to be in the classroom or lab before the official start time.
3. A student will be considered tardy if they are 1 minute late.
4. If a student has more than two unexcused absences from class, the student's grade will be affected. Please see course syllabi for specifics.
5. If a student is absent for 50% or more of a class or lab, they are considered absent for that class.
6. An extended lunch period is considered an incident of tardiness.
7. Severe weather or driving conditions, as deemed by the program director, may be considered an excused tardy.

Clinical Education Specific Attendance

Attendance and punctuality are seen as essential qualities, and timeliness is essential at the clinical site as it can be a direct indicator of what type of employee you may become. It is the student's responsibility to inform the school **and** the clinical preceptor if they are running late, will be absent, or have scheduled time off. Clinical days are seven (7) hours in length, not including the lunch break. Please make time allowances for weather, traffic and other circumstances that may cause a delay.

- Students must clock in and out upon arrival and departure from clinical.
- Students are expected to be in their assigned area and ready to work at their official start time.
- If a student leaves the facility for lunch or any other reason (approval required), they are required to clock out and in.
- Students are not to clock in more than 15 minutes before their scheduled start time at clinical.
- A student receives 0.5 points if:
 - They are one minute late.
 - Takes an extended lunch period.
 - Leaves before the end of their scheduled time.
- A one-half hour lunch break is required when a student is at the clinical site for more than five (5) hours (some sites allow 45 minutes, must

- check with clinical site).
- Severe weather or driving conditions, as deemed by the program director, may be considered an excused tardy.

Scheduled Break Weeks

Students have nine (9) scheduled break weeks over the length of the program as indicated by the academic calendar. Students who wish to take a vacation should utilize break weeks for this purpose.

Excused Absences

Bereavement and jury duty are considered excused absences from class or clinical and therefore do not count toward absences that can cause a course letter grade to drop. Students are responsible for any missed assignments and must make arrangements with their instructor to make up exams and assignments within one week of returning to class. PTO is not needed for excused absences from clinical.

Personal Time Off (PTO)

In addition to scheduled breaks and holidays, students are permitted 21 hours of PTO per semester. PTO is cumulative, and unused PTO will carry over into the next semester. PTO can only be taken in **30-minute increments**. Students should reserve PTO for unforeseen personal/family illnesses or emergencies. All PTO requests must be approved by program faculty.

- Exceeding PTO will require make-up time at the end of the fourth semester.
- Any PTO to be used in the morning must be requested before midnight the night before, or the student will be considered tardy.
- For a planned absence, PTO must be requested and documented in the attendance book, **and** the student must also notify the clinical instructor or designee in advance.
- Students who wish to leave early, or leave and return to the clinical site, must get verbal permission from program officials by phone.
- Interview Day: Students may take up to two (2) separate 3.5 hour blocks for a scheduled Cleveland Clinic MRI interview in the fourth semester. Documentation is required.

Earned Personal Time Off (EPTO)

Students may earn PTO by participating in extracurricular activities related to imaging and/or community service. All activities must be approved by program officials.

- A. The following activities qualify for EPTO, and all activities must be completed outside of school hours.
 - MRI professional society or meeting
 - One (1) hour for each additional educational session attended after meeting requirements.
 - Blood donation (2 hours/donation)
 - Cleveland Heart Walk
 - Greater Cleveland Food Bank
- B. EPTO MAXIMUMS
 - A maximum of fourteen (14) hours per academic year is permitted to be earned.

Exceeding PTO

This will result in a corrective action. Please refer to the Corrective Action for Points Policy

for more details.

Make-up Time

For an approved LOA, all tardiness, or exceeding PTO, make-up time must be completed after the end of the fourth semester.

- Make-up time begins the first day of spring semester, from 8:00 am – 3:30 pm each day until completed at the current clinical site.
- All program policies will remain in effect until all make-up time is complete and all graduation requirements are met.
- Students are not eligible to take the ARRT exam until all graduation requirements are met.
- If a student has less than two hours of total make up time, it may be added to the final week of clinical with program permission.

School Closure

Class and/or clinical may be canceled by the program director or designee. Closure of the school as a result of inclement weather or other emergency will be communicated to the students via text or email. It is the student's responsibility to inform the school of email address or phone number changes.

JRCERT Regulations

According to JRCERT regulations, students may not exceed 10 hours per day. However, SODI students must adhere to the 8:00 am – 3:30 pm and are only permitted to stay to complete a procedure.

Lack of Work

If a student is requested to leave **by the clinical site** because of lack of work, PTO will not be used. Documentation is needed from the clinical preceptor or designee for each occurrence.

Points for attendance violations are accumulated accordingly and remain for one (1) rolling year. A rolling year is defined as the 12-month period of active student participation immediately preceding the date of the chargeable occurrence. In the event of a leave of absence (LOA) of more than 30 days, the rolling year will be extended beyond 12 months by the amount of time approved on the LOA. The first two incidents of tardy or failure to swipe in/out are forgiven and will not result in points.

Failure to Clock-In/Clock-Out

For each instance that a student forgets to clock in or out, they must provide time verification from a technologist. See chart below for points for failure to swipe in and out.

Tardy / Leaving Early	.50
Failure to Clock In or Out	.25

Two Occurrences of No Clock-In/Clock-Out in One Day

The student is required to provide documentation within one week of the occurrence or will be charged with seven (7) hours of make-up time and the incident will be considered a NO CALL / NO SHOW requiring a corrective action. Please refer to the Corrective Actions Policy for more detail. Time verification is still required.

Corrective Action for Points

Corrective action for accumulation of points will be initiated according to the chart below. Please see the Corrective Action Policy for more detail. A corrective action will be initiated each time a student reaches a point level. Any corrective action (including points for attendance) may affect their clinical grade. See the Grading Procedures Policy for more detail.

<u>Corrective Action</u>	<u>Full Time</u>
Documented Counseling	4 points
Written Corrective Action	8 points
Final Written Warning / Suspension	10 points
Dismissal	12 points

No Call/No Show

This applies when a student does not attend class and fails to report off to the school or when a student does not attend clinical and fails to report off to both the school and clinical. Notification received more than two hours after scheduled start time is a "NO CALL/NO SHOW."

Leave of Absence

The Primary MRI program reserves the right to deny or grant leaves of absence. Leaves of absence must be submitted through the office of the Registrar and approved by the program director. Please see the School of Health Professions Leave of Absence policy for more information.

Tuition and Fees

Tuition and Fees:

Acceptance Fee:	\$300.00 (Non-refundable) (Applicable toward first semester tuition)
Registry Review Fee:	\$450.00 (spring semester)
Semester Tuition:	\$3,400.00 per semester
Total Program Tuition & Fees:	\$14,070.00

Estimated Additional Expenses may include but no limited to:

Textbooks	\$1,400.00
Uniforms	\$200.00
National Registry Exam Fee	\$225.00
Application Fee	\$20.00

There is no charge for parking, liability/malpractice insurance, or background screening.

Payments must be made on or before the due date. Tuition must be paid in full before a student can continue to the next semester unless they have received permission to do so from the program director.

The tuition and fees are subject to change upon due notice to the student.

The Primary MRI Program has the right to deny access to grades, transcripts, letters of recommendation, actions on appeals or grievances, class, clinical experience, exams and ARRT notification of completion, if a student fails to meet the financial obligations of this policy.

Students who are delinquent on any payments while using the IPP agreement described below, will be denied future use of the plans.

Payment Options

1. Payment in full
2. Semester payments: Due before the start of the first day of classes.
3. If payment is received after due date, a \$25 late fee will be assessed for each overdue payment
4. Installment Payment Plan

Installment Payment Plan (IPP)

The program offers an Installment Payment Plan (IPP) for students who desire this option. The plan allows the student to pay the semester tuition and fees in monthly payments beginning on the tuition due date. The cost of this service is \$25.00. There will be no other fee or interest charges for the service unless the student fails to meet payment deadlines. If a student fails to meet a pre-arranged payment due date, a \$25 monthly charge will be assessed to each overdue payment.

Academic Calendar

Date	Calendar Description
August 19, 2024	Fall Semester Begins
September 2, 2024	Labor Day – No Class or Clinical
September 5, 2024	Last Day to Receive 75% Tuition Refund
September 17, 2024	Last Day to Receive 50% Tuition Refund
September 17, 2024	Constitution Day – Classes/Clinicals in Session
October 4, 2024	Last Day to Receive 25% Tuition Refund
October 14-18, 2024	Fall Break – No Class or Clinical
November 28-29, 2024	Thanksgiving Break - No Class or Clinical
December 8-13, 2024	Final Exam Week
December 16, 2024 – January 3, 2025	Semester Break - No Class or Clinical
January 6, 2025	Spring Semester Begins
January 23, 2025	Last Day to Receive 75% Tuition Refund
February 4, 2025	Last Day to Receive 50% Tuition Refund
February 21, 2025	Last Day to Receive 25% Tuition Refund
March 3-7, 2025	Spring Break - No Class or Clinical
April 28 –May 2, 2025	Final Exam Week
May 2, 2025	Graduation
May 5 –16, 2025	Semester Break – No Class or Clinical
May 19, 2025	Summer Semester Begins
May 26, 2025	Memorial Day - No Class or Clinical
May 31, 2025	Last Day to Receive 75% Tuition Refund
June 8, 2025	Last Day to Receive 50% Tuition Refund

June 20, 2025

July 4, 2025

August 4-8, 2025

August 11-August 22, 2025

Last Day to Receive 25% Tuition Refund

Independence Day – No Class or Clinical

Final Exam Week

Semester Break - No Class or Clinical

August 25, 2025

Fall Semester Begins

Curriculum Outline

Fall Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
MR300	Cross Sectional Anatomy	64	0	0	64
MRI301	Procedures I	64	0	0	64
RT101	Patient Care	64	0	0	64
MR302	MRI Scanning Lab I	0	32	0	32
MR303	Introductory Clinical Experience I	0	0	112	112
TOTAL TERM					336

Spring Term		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
MR304	Procedures II	32	0	0	32
MRI305	Physics I	32	0	0	32
MR308	MRI Pathology	32	0	0	32
MR306	Intermediate Clinical Experience I	0	0	448	448
TOTAL TERM					544

Summer Term		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
ETH101	Healthcare Ethics and Law	24	0	0	24
MR307	Physics II	24	0	0	24
MR309	Intermediate Clinical Experience II	0	0	336	336
TOTAL TERM					384

Fall Term		Contact Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
MR310	Advanced Imaging	32	0	0	32
MR311	Registry Review	32	0	0	32
MR312	Advanced Clinic Experience	0	0	448	448
TOTAL TERM					512

TOTAL CLOCK HOURS: 1776

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9780323654401	Patient Care in Radiography with an Introduction to Medical Imaging,	Ehrlich, Coakes	10th	2021	Elsevier
9781133960867	Fundamentals of Sectional Anatomy: An Imaging Approach	Lazo, D.	2nd	2015	Cengage
9781133960850	Workbook for Fundamentals of Sectional Anatomy: An Imaging Approach	Lazo, D.	2nd	2014	Cengage
9781119759331	Handbook of MRI Technique	Westbrook, C.	5th	2022	Wiley Blackwell
9780323068185	Handbook of MRI Scanning	Burghart & Finn	1st	2011	Elsevier
9781119392002	MRI in Practice	Westbrook & Talbot	5th	2018	Wiley Blackwell
9781119053552	MRI at a Glance	Westbrook	3rd	2016	Wiley Blackwell
9781260121940	CT & MRI Pathology: A Pocket Atlas	Grey & Ailinani	3rd	2018	McGraw Hill
9780323828871	Legal and Ethical Issues for Health Professions	Nguyen, J.	5th	2024	Elsevier
9781444333909	Review questions for MRI	Roth, Faulkner	2nd	2013	Wiley Blackwell

Professional Appearance

Uniforms consist of either navy blue uniform tops (scrub) and white pants (scrub) or white uniform tops (scrub) and navy blue pants (scrub). Warm-up jackets may be included but must be the same color as the uniform tops. Sweaters and sweatshirts are not permitted unless in the classroom.

1. Shirts (tanks, t-shirts, turtlenecks) both long or short sleeved may be worn under the uniform but must be solid white. If wearing a long sleeve white shirt, the shirt may not extend beyond the wrist and may not have thumbholes. No decals, designs or words are permitted on the undershirts. Crew-neck shirts are highly recommended under V-neck uniform tops. If a short-sleeve t-shirt is worn underneath a short-sleeve uniform top, the sleeves of the t-shirt must not hang below the uniform top sleeves. Three quarter ($\frac{3}{4}$) sleeve length tops are not permitted.
2. **IN CLASS DRESS CODE ONLY:** Same as above but students are permitted to wear SODI, Radiology, and Cleveland Clinic logo fleece or sweat shirts **only over the uniform**.
3. All shirts and jackets must have the school patch sewn on the left sleeve, two fingers down from the top of the left shoulder seam.
4. Socks must be solid white, black, grey or navy blue.
5. Undergarments should not be visible beneath the uniform.

6. Uniforms must be freshly laundered and wrinkle-free each time they are worn.
7. Shoes must be either white, black, navy or grey athletic shoes, or any combination of these colors. They must not have any different colored stitching, stripes, insignias, etc. and must always be kept clean.
8. The Cleveland Clinic ID badge must be worn at all times, with the name and photo visible, at the chest or collar level.
9. The program-provided dosimeter must be worn at all times when at clinical.
10. Hospital provided scrubs may only be worn in surgery and must be returned before leaving the clinical site.

POST-PRIMARY MAGNETIC RESONANCE IMAGING (MRI)

<i>Program Snapshot: Post-Primary Magnetic Resonance Imaging (MRI)</i>	
Program Director	Halley Majersky, MEd, R.T. (R)(M)(CT)(MR) majersh@ccf.org
Location	CCAC – Building 2 25900 Science Park Drive Beachwood, OH 44122
Clock Hours	420-620
Program Length	36-52 weeks / 9-12 months
Delivery Method	Blended
Total Cost (tuition + fees)	Residential - \$3,360.00 / Blended - \$3,410.00

Overview

The Post-Primary Magnetic Resonance Imaging (MRI) Program is a part-time, post-primary, 9-12 month (approximately 2 terms) program. Time to complete the program depends on the student's availability for clinic education. This Post-Primary MRI Program requires the students to be a registered technologist in radiography, nuclear medicine, radiation therapy or ultrasound, or a student in the final year of one of the aforementioned programs. Upon completion of coursework, clinical education, and required competencies, students will be awarded a certificate of completion and will be eligible to take the American Registry of Radiologic Technologists (ARRT) Magnetic Resonance Imaging Post-Primary certification exam.

Mission Statement

To develop exceptional imaging professionals who meet the needs of the community and provide a foundation for lifelong learning.

Objectives

Goal 1: *The student/graduate will be clinically competent.*

- Students will complete required competencies.
- Students will provide appropriate patient care.
- Students will demonstrate clinical competency.
- Students will perform exams safely.
- Students will produce quality diagnostic images.

Goal 2: *The student/graduate will demonstrate professionalism.*

- Students will participate in continuing education or professional development meetings.
- Students will demonstrate professional behaviors.
- Students will demonstrate an understanding of patient confidentiality (HIPAA).

Goal 3: *The student/graduate will demonstrate effective critical thinking.*

- Students will be able to modify routine procedures for non-routine patients.
- Students will effectively critique images to determine if corrective action is required.
- Students/graduates will acquire critical thinking skills and problem-solving abilities that

enhance their clinical experience.

Goal 4: *The student/graduate will demonstrate effective communication.*

- Student will demonstrate effective written communication.
- Student/graduate will demonstrate professional verbal communication in the health care environment.

Approval

The Post-Primary Magnetic Resonance Imaging Program is approved and registered by the Ohio State Board of Career Colleges and Schools in accordance with Ohio Revised Code Chapter 3332 (School Registration No. 2165).

Ohio State Board of Career Colleges and Schools
30 E Broad St Suite 2481
Columbus, OH 43215
614 466-2752
Scr.ohio.gov

Faculty

Halley Majersky, MEd, R.T. (R)(M)(CT)(MR), Program Director (full-time)

Education: Certificate, Radiology, Trumbull Memorial Hospital School of RT
B.S., Computed Tomography, Kent State University
M.S., Adult Education, Cleveland State University

Phone: 216-212-0484 Email: majersh@ccf.org

Kimberly Saghy, BA.S., R.T.(R)(CT)(MR)MRSO, CT/MRI Instructor (full-time)

Education: Certificate, Adult Education, Cleveland State University
A.A.S., Radiography, Lorain County Community College
B.S., Healthcare Management, Youngstown State University

Phone: 216-554-3375 Email: saghyk@ccf.org

Gabriel Kroupa, MPH, (NM)(MR)MRSO, MRI/RT Instructor (full-time)

Education: Certificate, Magnetic Resonance Imaging, Cleveland Clinic School of Diagnostic Imaging
B.S., Nuclear Medicine, University of Findlay
M.S., Public Health, Kent State University

Phone: 330-904-0341 Email: kroupag@ccf.org

Facilities

The Post-Primary Magnetic Resonance Imaging Program has sufficient instructional equipment, laboratory supplies, and storage for student use and for teaching the didactic and supervised laboratory education components of the program. The program does not require laboratory space, although

classroom space is available to the students for additional study purposes. Classrooms are equipped with computers with internet and intranet and available accessible to students.

The program's equipment and supplies are readily available to support the delivery of the program curriculum. Sufficient supplies are available to accommodate all enrolled students in class, lab and clinical as necessary. Students have access in each classroom to computers with internet and intranet. They are also able to access MyLearning and Trajecsys on the computers.

Advisory Board

The Post-Primary Magnetic Resonance Imaging Program's Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Joe Parker	BA	Administrator, Diagnostic Services Institute, Cleveland Clinic
Mark Moore	RT(R)	Education Coordinator, Cleveland Clinic Foundation Cleveland Clinic
Mari Knettle	DPT, EdD, FASAHP	Dean, School of Health Professions, Cleveland Clinic
Halley Majersky	MEd RT(R) (M) (CT) (MR)	Program Director, Cleveland Clinic
Kim Saghy	BS RT(R) (CT) (MR)MRSO	Instructor, Computed Tomography and Magnetic Resonance Imaging Programs, Cleveland Clinic
Christine Clark	RT(R)	Director of Imaging, Euclid Hospital, Cleveland Clinic
Christine DeCorte	RT(R)	Director of Imaging, Fairview Medical Center, Cleveland Clinic
Rick White	RT(R)	Director of Radiology, Akron General Hospital, Cleveland Clinic
Mark Puletti	RT(R)	Clinical Manager Family Health Centers, Cleveland Clinic
Christopher White	RT(R)	Clinical Manager, Lutheran Hospital, Cleveland Clinic
Scott Berg	RT(R)	Director of Imaging, Medina Hospital, Cleveland Clinic
Tera Munaretto	ARDMS	Director Radiology Services, Hillcrest Hospital, Cleveland Clinic
Starla Paige	RT(R)	Director of Imaging, Marymount Hospital/CCHS, Cleveland Clinic

Cynthia Lewis	RT(R)	South Pointe Hospital, Cleveland Clinic
Melanie Huth	RT(R)	Clinical Manager, Family Health Centers, Cleveland Clinic
Scott Klammer	RT(R)	Director of Imaging Services, Regional Hospitals, Cleveland Clinic
TBD		Distance Education Specialist

Technical Standards

- Candidates must have good eyesight either naturally or through correction. They must be able to see the printed words in a textbook and be able to read and accurately interpret the numbers on a radiographic technique chart.
- Candidates must have the ability to hear instructions and be able to respond to verbal requests by patients/customers.
- Candidates must be able to lift a minimum of thirty (30) pounds and possess the ability to support up to 175 pounds. MRI technologists must assist, support and move patients from wheelchairs and carts onto examination tables which requires the use of their backs and muscles. MRI technologists work while standing, sometimes for hours. Candidates must be able to move around and stand for long periods of time.
- Candidates must possess good verbal and nonverbal communications skills as evidenced from the application and interview process. MRI technologists must verbally instruct patients and be able to express concern and empathy for them. MRI technologists must perform data entry with dexterity and accuracy.
- Students must be physically and mentally capable of fulfilling the objectives of the MRI program. The school will make reasonable accommodations to assist a student with a disability to advance through the program. Students must have sensory function adequate for patient assessment and care. They must possess the physical status needed to provide all aspects of care in a safe manner.

Admissions Requirements

Applicants to the Post-Primary Magnetic Resonance Imaging Program must be a registered technologist in radiography, nuclear medicine, radiation therapy, or ultrasound, or a student in the final year of one of the aforementioned programs. Registration must be through The American Registry of Radiologic Technologists (ARRT) or The Nuclear Medicine Technology Certification Board (NMTCB) or the American Registry of Diagnostic Medical Sonography (ARDMS).

Application Process

Applications will be through the Campus Café system. The deadline for applications is July 31st each year.

Individuals applying to the Post-Primary MRI program must submit the following documents:

1. Registered technologists must submit a copy of current licensure and certification.

2. Must provide school transcripts and receive approval from CT/MRI program coordinator (students without ARRT or equivalent registration).
3. Submit an application form with payment of a non-refundable \$20.00 application fee. Application forms may be downloaded from the website. The deadline for applications is July 31st each year.
4. Proof of health insurance.
5. Proof of current certification in Basic Life Support for Health Care Providers from the American Heart Association.

Rolling Admissions

Students are accepted into the program based on a rolling admission process. Once all spots have been filled for a class, applicants will be placed on a waiting list. If accepted candidates relinquish their positions, candidates will be removed from the waiting list and notified of admission.

Criminal Background Check

Candidates must pass a criminal background check to be accepted into the Post-Primary MRI program. If a candidate does not pass the criminal background check, they will not be allowed to continue in the program. If the candidate plans to attend Akron Children's Hospital for their clinical experience, they will be asked to complete further requirements. These requirements will be discussed with the requesting candidate at the time of their clinical rotation.

Safety Screening

All potential Post-Primary MRI students shall undergo screening as part of the enrollment process to ensure their own safety in the MR environment. Students shall report any trauma or surgery they may have experienced prior to and at any time during enrollment that may have introduced ferromagnetic material or an implanted device. Appropriate screening of this material to determine the safety of permitting the student in zones III and IV will be completed. Students are required to complete an MR safety screening form and update it at as necessary to document such implants or other foreign bodies.

Forms for the MRI safety and screening are provided to the student by program officials after acceptance into the program.

Graduation Requirements

Upon successful completion of the below courses, clinical program requirements and ARRT requirements, the student is awarded a Certificate of Completion and is eligible for the ARRT registry examination.

To complete the Post-Primary Magnetic Resonance Imaging Program, the following courses must be completed:

- Introduction to Magnetic Resonance Imaging
- Cross Sectional Anatomy and Pathology
- Magnetic Resonance Imaging Physics
- Clinical Experience in Magnetic Resonance Imaging

Additionally, prior to completion of the Post-Primary MRI program, students must meet the following criteria:

- All competencies must be completed as outlined in the Competency Examination Policy.
- Tuition and fees must be paid in full.
- All reference books or other material must be returned.
- All ID badges must be returned or fee must be paid.
- Clinical site survey completed.

Clinical Requirements for MRI

Clinical Requirements for Post-Primary MRI*

Clinical rotation 1:

Minimum of 10 competency evaluations

Minimum of 4 student evaluations

Minimum of 50 procedure signatures**

Required MRI Safety Form - site specific

Clinical rotation 2:

Minimum of 15 competency evaluations

Minimum of 4 student evaluations

Minimum of 75 procedure signatures**

Required MRI Safety Form - site specific

Academic Awards at Graduation

Based on the final cumulative grade point averages achieved by graduates. A graduate with a GPA between 3.5 and 3.99 will be commended as graduating with Academic Honors. A graduate with a GPA of 4.0 will be commended as graduating with Academic Distinction.

Grading Scale

The grading scale is as follows:

Scale	Grade	GPA
93-100%	A	4.0
84-92%	B	3.0
*75-83%	C	2.0
67-74%	D	1.0
0-66%	F	0.0

Students must maintain a "C" grade or better in each course of the Post-Primary MRI Program in order to receive a certificate upon completion of all courses. Students not satisfying this minimal academic requirement will be counseled and those receiving a "D" or "F" in any course will not complete the program.

Course grades are reviewed by the instructor and students are counseled as needed throughout the semester. Program faculty monitor student grades throughout the semester and when a student is identified to be at risk of not passing a class, the instructor will either call the student or send an email for them to meet and discuss what approach to take to improve the grade.

*Upon receipt of less than a "C" in any course, the student must retake this course at his or her own

expense and receive a passing grade to complete the program.

If a student does not complete all required course assignments by the end of the semester, they will receive an incomplete grade. Incompletes must be resolved within 5 weeks into the next semester or the grade converts to an “F” or failing grade.

Students who are dismissed from the program may reapply for acceptance. Their re-acceptance is subject to approval by the program’s Subcommittee on Student Readmission.

Clinical Grades

Students will be given an established number of points for each clinical experience. Each semester clinical grade will be determined by:

1st Clinical Experience Rotation:

<u>Item Required</u>	<u>Number</u>	<u>Points Possible</u>
Evaluations	4	16
Signatures	Minimum of 50	50
Competencies	Minimum of 10	10
MRI Safety Orientation	1	5
Clinical Site Evaluation	1	5
Program/Department policies & practices		Four points off for each documented counseling Six points off for each written corrective action Ten points off for each final written corrective action or suspension

2nd Clinical Experience Rotation:

<u>Item Required</u>	<u>Number</u>	<u>Points Possible</u>
Evaluations	4	16
Signatures	Minimum of 50	50
Competencies	Minimum of 15	15
MRI Safety Orientation	1	5
Clinical Site Evaluation	1	5
Program/Department policies & practices		Four points off for each documented counseling Six points off for each written corrective action Ten points off for each final written corrective action or suspension

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Post-Primary MRI program will occur after the completion of the first semester of the program. This will ensure MRI students are meeting the 75% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

Attendance in training programs has been shown to be a reasonable predictor of work attendance during employment. Therefore, attendance during a training program is carefully monitored. Each student is responsible for properly signing in and out of each class and clinical session.

A monthly review of attendance will be conducted. An alert letter may be issued based on current status. If at any point during the course of the program, it is determined that a student cannot meet the SAP standards, the student's financial aid will be terminated, and the student may be subject to dismissal from the program. The program director or designee may implement academic/attendance probation, or dismissal from the campus. The student may be required to furnish an alternate method of payment.

Grades and attendance are checked each time a financial aid payment arrives for a student.

Make-Up Time

Make up time may be granted, if available, to meet attendance and financial aid requirements for absences caused by reasons an employer would consider acceptable. Make-up time is arranged with program officials and must be approved by an authorized administrator. Make-up time is not intended to allow a student to earn leave time or to improve overall attendance record. Make-up time must be completed within the current payment period and may not exceed 10% of the total monthly required hours.

General Attendance and Timeliness

It is the responsibility of each student to be accountable to the faculty of the school and the clinical preceptors at each clinical site. Please use the following guide to inform the school faculty of any changes to your schedule. Depending on the circumstances, corrective action may result.

Call or email the school faculty:

- If a student is unable to attend class or clinical.
- If a student is running late to class or clinical (include an estimated time of arrival).
- If a student is told to leave clinical for lack of work / patients. The supervising technologist must call or email program officials. ~~It must also be documented in Trajecsys by the student.~~
- If a student unexpectedly needs to leave clinical early, notify a program official prior to leaving.

Record of Correction Action for Attendance

Records of corrective action for attendance may be reviewed in matters relating to employment references, early graduation, dismissal, and reinstatement after dismissal.

No Call / No Show

This applies when a student does not attend clinicals as scheduled and fails to report off to both the school and the clinical site. Notification received more than one (1) hour after the scheduled start time is treated as a "no call."

Excused Absences

Bereavement and jury duty are considered excused absences from class or clinical and therefore do not count toward absences that can cause a course letter grade to drop. Students are responsible for any

missed assignments and must make arrangements with their instructor to make up exams and assignments within one week of returning to class.

Failure to Clock In and Out

For each instance that a student forgets to clock in or out, they must provide a time verification from a technologist to verify actual start/end times. See chart below for points for failure to clock in and out. Further documentation must be made to explain tardiness or early dismissal from the clinical site.

School Closure

Class and/or clinical may be canceled only by the program director or designee. Closure of the school as a result of inclement weather or other emergency situation will be communicated via text or email. Students are not to call the school or text program officials to inquire as to canceling of class or clinical.

Continuing Education

The American Society of Radiologic Technologists ASRT requires that students are present for all lectures in entirety to receive credit for the course. Students may not miss any classes for CE credit to be awarded.

Grade Drop for Excessive Absences

A student can miss no more than 2 lecture classes without penalty. Any absence after the allotted amount will drop the final grade by one letter for each absence unless an extended illness is involved or a special circumstance exists and the student brings in an approved excuse (examples of an approved excuse includes a physician's excuse, jury duty summons, or bereavement). An excuse must be turned in to the instructor within 1 week of the date the student returns to class. If a student fails to do this, the absence will be counted as an unexcused absence. It is the responsibility of the student to contact the instructor when an extended absence occurs. The student is required to meet with the course instructor upon return to class to assess missed assignments and set a timeline for completion of all missed work.

Clinical Education Specific Attendance

Attendance and punctuality are seen as essential qualities for your chosen profession. Timeliness is essential at the clinical site as it can be a direct indicator of what type of employee you may become. It is the student's responsibility to inform the school **and** the clinical site if they are running late, will be absent, or have scheduled time off. Please make time allowances for weather, traffic and other circumstances that may cause a delay.

1. Students are not to clock in more than 15 minutes before their scheduled start time at clinical.
2. Students are expected to be in their assigned area and ready to work at their official start time.
3. Students must utilize the program timekeeping system upon arrival and departure.
4. A student will receive 0.50 points if:
 - They are one minute late.
 - Takes an extended lunch period.
 - Leaves before the end of their scheduled time.
5. A 30-minute lunch break is required when a student is at the clinical site for more than five (5) hours.
6. If a student leaves the facility for lunch or any other reason, they are required to clock out and back in.

7. Students cannot attend clinical in excess of 10 hours per day.
8. Students may not exceed 40 hours in a week of clinical time (Sunday-Saturday).
9. Severe weather or driving conditions as deemed by program director may be considered an excused tardy.

Disciplinary Points Chart

Infraction	Points
Absent	1.0
Failure to Clock In or Out	.50
Failure to Notify School and/or Site	1-2
No submitted schedule in MyLearning	.25
Schedule change made less than 24 hours	.25
Scheduled time doesn't match Trajecsyst times	.50
Tardy / Leaving Early	.50
Works less than 4 hours per day or 15 hours per week	.50

Tardy / Leaving Early

Students are expected to be at their assigned area, ready to start when their shift begins, and stay until the shift ends. When a student clocks in beyond their scheduled start time (i.e. one (1) minute after scheduled start time), or clocks out before the end of their shift (i.e. one (1) minute before end time), they will be considered tardy.

Tuition and Fees

Total Tuition

MRI Program Traditional: \$3,360.00

MRI Program Online: \$3,410.00

Individual Courses:

Introduction to MRI Online: \$480.00

Cross Sectional Anatomy & Pathology \$710.00

MRI Physics: \$710.00

MRI Physics Online: \$760.00

MRI Clinical: \$1,430.00

Additional Expenses:

Onboarding fee: \$30.00

Application fee: \$20.00

Installment plan fee: \$25.00

Acceptance fee: \$100.00 applicable toward first semester tuition

Textbooks (estimated): \$400.00

ARRT Registry Exam: \$200.00 (\$400.00 if using NMTCB or ARDMS as supporting category)

Uniforms (estimated): \$250.00

Financial Aid

The Post-Primary MRI Program participates in the Post 911 GI Bill®. Please contact the United States Department of Veteran Affairs for current information. Information can also be found online at www.us-gibillschools.com.

The program will assess no penalty, including the assessment of late fees, the denial of access to classes, libraries or other institutional facilities, or the requirement that a Chapter 31 or Chapter 33 recipient borrow additional funds to cover the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment by the U.S. Department of Veterans Affairs. Students can obtain information regarding the federal governments' Lifetime Learning Credit and Hope Scholarship at www.irs.gov. In addition, students can search the Cleveland Foundation website to see if they meet the eligibility requirements of the various scholarships at www.clevelandfoundation.org. Cleveland Scholarship Program information is available at www.cspohio.org.

Students are encouraged to apply for the annual Ohio Society of Radiologic Technologists (OSRT) grants. Applications and guidelines are available on the OSRT website at www.osrt.org and students are notified when the deadline is each year. The OSRT grants are distributed at the annual meeting. The student need not be present to be awarded a grant. Students may also be eligible for an annual American Society of Radiologic Technologists (ASRT) scholarship. Information on the ASRT scholarship is available online at www.asrt.org and will also be distributed to the students as it becomes available to the program.

Academic Calendar

Date	Calendar Description
August 19, 2024	Fall Semester Begins
September 2, 2024	Labor Day – No Class or Clinical
September 5, 2024	Last Day to Receive 75% Tuition Refund
September 17, 2024	Last Day to Receive 50% Tuition Refund
September 17, 2024	Constitution Day – Classes/Clinicals in Session
October 4, 2024	Last Day to Receive 25% Tuition Refund
October 14-18, 2024	Fall Break – No Class or Clinical
November 28-29, 2024	Thanksgiving Break - No Class or Clinical
December 8-13, 2024	Final Exam Week
December 16, 2024 – January 3, 2025	Semester Break - No Class or Clinical
January 6, 2025	Spring Semester Begins
January 23, 2025	Last Day to Receive 75% Tuition Refund
February 4, 2025	Last Day to Receive 50% Tuition Refund

February 21, 2025	Last Day to Receive 25% Tuition Refund
March 3 - March 7, 2025	Spring Break - No Class or Clinical
April 28 –May 2, 2025	Final Exam Week
May 2, 2025	Graduation
May 5 –May 16, 2025	Semester Break – No Class or Clinical

May 19, 2025	Summer Semester Begins
May 26, 2025	Memorial Day - No Class or Clinical
May 31, 2025	Last Day to Receive 75% Tuition Refund
June 8, 2025	Last Day to Receive 50% Tuition Refund
June 20, 2025	Last Day to Receive 25% Tuition Refund
July 4, 2025	Independence Day – No Class or Clinical
August 4-8, 2025	Final Exam Week
August 11-22, 2025	Semester Break - No Class or Clinical

August 25, 2025 **Fall Semester Begins**

Curriculum Outline

Fall Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
MRI104**	Introduction to MRI Online*, **	24	0	0	24
MRI102	Cross Sectional Anatomy & Pathology	0	0	48	48
TOTAL TERM					72

Spring Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
MRI103 or MRI201**	MRI Physics (online** or traditional)	48	0	0	48
MRI200	MRI Clinical Rotation	0	0	Hours vary	Hours vary
TOTAL TERM					48 (+rotation)

Summer Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
MRI200	MRI Clinical Rotation continues (if needed)	0	0	Hours vary	Hours vary

CLINICAL EXPERIENCE

Clinical Experiences occur in spring & summer semesters.
The number of hours vary

15-40* 300-500

and depend on the student's availability to complete during these terms. Students must complete 300-500 clinical experience hours to meet graduation requirements.
 **Online delivery—Not eligible for VA Benefits

TOTAL TERM 300-500

TOTAL CLOCK HOURS: 420-620

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9781133960867	Fundamentals of Sectional Anatomy: An Imaging Approach	Denise Lazo	2nd	2014	Cengage
9781133960850	Workbook to Accompany Fundamentals of Sectional Anatomy: An Imaging Approach	Denise Lazo	2nd	2014	Cengage
9781260121940	CT & MRI Pathology: A Pocket Atlas	Michael Grey & Jagan Ailani	3rd	2018	McGraw Hill
9781119392002	MRI in Practice	Catherine Westbrook & John Talbot	5th	2018	Wiley Blackwell
9780323068185	Handbook of MRI Scanning	Geraldine Burghart & Carol Finn	1st	2011	Elsevier

Professional Appearance

Uniforms

Uniforms consist of either navy blue uniform tops (scrub) and white pants (scrub) or white uniform tops (scrub) and navy-blue pants (scrub). Warm-up jackets may be included but must be the same color as the uniform tops. Sweaters and sweatshirts are not permitted.

Additionally, MRI should be aware of the follow:

1. Shirts (tanks, t-shirts, turtlenecks) both long or short sleeved may be worn under the uniform but must be solid white. If wearing a long sleeve white shirt, the shirt may not extend beyond the wrist and may not have thumbholes. No decals, designs or words are permitted on the undershirts. Crew- neck shirts are highly recommended under V-neck uniform tops. If a short-sleeve t-shirt is worn underneath a short-sleeve uniform top, the sleeves of the t-shirt must not hang below the uniform top sleeves. $\frac{3}{4}$ sleeve length tops are not permitted.
2. Post-Primary MRI students are permitted to wear street clothes to class.
3. All shirts and jackets must have the school patch sewn on the left sleeve, two fingers down from the top of the left shoulder seam.

4. Uniforms must be freshly laundered and wrinkle-free each time they are worn.
5. Socks/hosiery must be solid white.
6. Shoes must be either white, black, navy or grey athletic shoes, or any combination of these colors. They must not have any different colored stitching, stripes, insignias, etc. and must always be kept clean.
7. The Cleveland Clinic ID badge must be worn at all times, with the name and photo visible, at the chest or collar level.
8. Hospital provided scrubs may only be worn in surgery and must be returned before leaving the clinical site.

RADIOLOGIC TECHNOLOGY (BEACHWOOD)

<i>Program Snapshot: Radiologic Technology (Beachwood)</i>	
Program Director	Halley Majersky, MEd, R.T. (R)(M)(CT)(MR) majersh@ccf.org
Location	CCAC – Building 2 25900 Science Park Drive Beachwood, OH 44122
Clock Hours	2,328
Program Length	84 weeks / 21 months
Delivery Method	Residential
Total Cost (tuition + fees)	\$16,070.00

Overview

The Radiologic Technology Program (Beachwood) is a full-time, 21-month (5 terms) program designed to prepare students for a career as a radiologic technologist. Upon completion of the program and college degree requirement courses, the graduate will earn both a Certificate in Radiology Technology from Cleveland Clinic and be eligible to sit for the ARRT Registry Examination.

Mission Statement

To develop exceptional imaging professionals who meet the needs of the community and provide a foundation for lifelong learning.

Objectives

Goal #1: The student/graduate will be clinically competent.

Outcomes:

- Student will provide appropriate patient care.
- Student will demonstrate clinical competency appropriate to their level of experience.
- Student will perform exams safely.
- Student will produce quality diagnostic images.

Goal #2: The student/graduate will demonstrate professionalism.

Outcomes:

- Student will demonstrate an understanding of the importance of professionalism.
- Student will demonstrate professional behavior.
- Student will demonstrate an understanding of patient confidentiality (HIPAA).

Goal #3: The student/graduate will demonstrate effective critical thinking.

Outcomes:

- Student will be able to modify routine procedures for non-routine patients.
- Student will effectively critique images to determine if corrective action is required.

- Student will acquire critical thinking skills and problem-solving abilities that enhance their clinical experience.

Goal #4: The student/graduate will demonstrate effective communication.

Outcomes:

- Student will demonstrate effective written communication.
- Student will develop professional verbal communication in the health care environment.

Accreditation

Programmatic Accreditation

The Radiologic Technology Program (Beachwood) is accredited by the Joint Review committee on Education in Radiologic Technology:

Joint Review Committee on Education in Radiologic Technology (JR-CERT)
20 N. Wacker Drive, Suite 2850
Chicago, IL, 60606-3182
(312) 704-5300

State Approval

The Radiologic Technology Program (Beachwood) is approved and registered by the Ohio State Board of Career Colleges and Schools in accordance with Ohio Revised Code Chapter 3332 (School Registration No. 2165).

Ohio State Board of Career Colleges and Schools
30 E Broad St Suite 2481
Columbus, OH 43215
614 466-2752
Scr.ohio.gov

Faculty

Halley Majersky, MEd., R.T. (R)(M)(CT)(MR), Program Director (full-time)

Education: Certificate, Radiology, Trumbull Memorial Hospital School of RT
B.S., Computed Tomography, Kent State University
M.S., Adult Education, Cleveland State University

Phone: 216-212-0484

Email: majersh@ccf.org

Kevin McDermott, MEd, RT(R), Coordinator

Education: A.A.S., Radiology, Cuyahoga Community College
B.S., Media Production, Kent State University
MEd., Health Professions Education, Cleveland State University

Phone: 216-678-1753

Email: mcdermk@ccf.org

Jennifer Bridge, BRS, R.T. (R)(CT), Radiography Instructor (full-time)

Education: AAS, Radiography, Cleveland Clinic & Cuyahoga Community College
BRS, University of Cincinnati

Phone: 216-678-1753

Email: paisionj@ccf.org

Kimberly Saghy, BA.S., R.T.(R)(CT)(MR), CT/MRI Instructor (full-time)

Education: Certificate, Adult Education, Cleveland State University
A.A.S., Radiography, Lorain County Community College
B.S., Healthcare Management, Youngstown State University

Phone: 216-554-3375

Email: saghyk@ccf.org

Facilities

The Radiologic Technology Program (Beachwood) has access to dedicated classroom spaces that include computers with internet and intranet. Students are able to access MyLearning and Trajecs on the computers. The program's equipment and supplies are readily available to support the delivery of the program curriculum. Sufficient supplies are available to accommodate all enrolled students in class, lab and clinical as necessary. The program provides adequate instructional equipment, laboratory supplies, and storage for student use and for teaching the didactic and supervised laboratory education components of the program. The students are provided with dosimeters to document their radiation exposure. The Cleveland Clinic physicists review the exposure reports to ensure that no student has unacceptable exposure. Students have access in each classroom to computers with internet and intranet. They are also able to access MyLearning and Trajecs on the computers.

The program also provides adequate instructional equipment, laboratory supplies, and storage for student use and for teaching the didactic and supervised laboratory education components of the program. The students are provided with dosimeters to document their radiation exposure and Cleveland Clinic physicists review the exposure reports to ensure that no student has unacceptable exposure.

Advisory Board

The Radiologic Technology Program's (Beachwood) Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Joe Parker	BA	Administrator, Imaging Institute, Cleveland Clinic

Greg Leisure		Department Administrator, Imaging Institute, Cleveland Clinic
Mari Knettle	DPT, EdD, FASAHP	Dean, School of Health Professions, Cleveland Clinic
Halley Majersky	MEd, RT (R) (CT) (M) (MR)	Program Director, Cleveland Clinic
Mark Moore	RT (R)	Education Coordinator, Cleveland Clinic
Rick White	RT (R)	Director of Radiology, Cleveland Clinic
Christine Clark	RT (R)	Director of Imaging, Cleveland Clinic
Christine DeCorte	RT (R)	Director of Imaging, Cleveland Clinic
Mark Puletti	RT (R)	Clinical Manager Family Health Centers, East Cleveland Clinic
Brooke Kishmarton	RDMS, RVT	Clinical Manager Family Health Centers, West Cleveland Clinic
Tera Munaretto	RDMS, RVT	Director of Imaging, Cleveland Clinic
Melanie Huth	RT (R)	Clinical Manager Family Health Centers, South Cleveland Clinic
Chris White	RT (R)	Director of Imagin, Cleveland Clinic
Scott Berg	RT (R)	Director of Imaging, Cleveland Clinic
Cynthia Lewis	RT (R)	Director of Imaging, Cleveland Clinic
Scott Klammer	RT (R)	Director of Imaging Services, Regional Radiology, Cleveland Clinic

Technical Standards

1. Candidates must have good eyesight either naturally or through correction. They must be able to see the printed words in a radiographic textbook and be able to read and accurately interpret the numbers on a radiographic technique chart.
2. Candidates must have the ability to hear instructions and be able to respond to verbal requests by patients/customers.
3. Candidates must be able to lift a minimum of thirty (30) pounds and possess the ability to support up to 175 pounds. Radiographers must assist, support and move patients from wheelchairs and carts onto radiographic examination tables which requires the use of their backs and muscles.
4. Radiographers work while standing, sometimes for hours. Candidates must be able to move around and stand for long periods of time.
5. Radiographers must verbally instruct patients and be able to express concern and empathy for them. Candidates must possess good verbal and nonverbal communications skills as evidenced from the application and interview process. Radiographers must perform data entry with dexterity and accuracy.

6. Candidates must be physically and mentally capable of fulfilling the objectives of the radiography program. The school will make reasonable accommodations to assist a student with a disability to advance through the program. However, candidates must be aware that the school is located on the third floor of a building with no elevator. Candidates must have sensory function adequate for patient assessment and care. They must possess the physical status needed to provide all aspects of care in a safe manner.

Admissions Requirements

1. Candidates must be high school graduates or earned a certificate of equivalent education recognized by the U.S. Department of Education.
 - If a student has attended high school or college in another country the student must submit an official translated transcript.
 - Foreign transcripts must be evaluated by either the National Association of Credential Evaluation Services (NACES) or World Education Services (WES).
2. All candidates must satisfy the following minimum requirements. All courses must be college credit courses with a "C" grade or better while maintaining a minimum GPA of 2.5. All courses must be from a regionally accredited college and have a traditional letter grade. The Radiologic Technology Program (Beachwood) does not accept the pass/no pass grading option.
 - Anatomy & Physiology I & II or Anatomy and Physiology for Diagnostic Medical Imaging
 - BIO 1221 for Cuyahoga Community College students. Must be completed within the last 5 years.
 - Medical Terminology
 - Only have 1-2 college credits to complete towards an associate degree

Upon acceptance, eight (8) hours of clinical observation must be completed within the first 8 weeks of the program.

Application Process

The Radiologic Technology Program (Beachwood) uses a selective process to determine which students will be accepted into the program. Acceptance into the program is based on a point system that includes scores from a behavior-based interview, high school and college GPAs, and the number of additional science and math classes with a grade of "C" or better. The higher the grade on the science and math courses, the more points awarded.

All candidates must complete an application to the Radiologic Technology Program (Beachwood) by meeting the following criteria:

- Complete and submit to the program director an application form with payment of a non-refundable \$20.00 application fee.
- Send official high school transcripts or GED and college transcripts to the School of Health Professions Registrar's office.
- Candidates are encouraged to submit the previous documents by February 1st or until the program has sufficient applications that meet the requirements.
- Candidates may be considered who meet most of the requirements if there is evidence that they will meet the requirements prior to the beginning of the program.

Applications will be accepted through the Campus Café system.

Graduation Requirements

All students must meet the following criteria for graduation. Students graduate from the program with a Certificate in Radiologic Technology after completing 5 semesters of education. Students must graduate within 32 months (150% of program length) after starting the program.

Criteria

1. Satisfactory completion of all program courses.
2. All competencies must be completed as outlined in the Competency Examination Policy.
3. All required ARRT mandatory & elective competencies must be completed.
4. All required ARRT general patient care procedures must be completed.
5. All required Developmental Examinations and corrections must be completed.
6. All regular and make-up hours must be completed.
7. Tuition payment and fees must be paid in full.
8. All reference books or other material must be returned, including any resources from the CC Library.
9. ID badge, dosimeter, and markers must be returned. A fee will be charged for missing ID badge, dosimeter, and markers. All fees must be paid prior to graduation.
10. Graduation survey must be completed.
11. Employer release form must be signed.
12. All required college-level courses for degree completion must be completed and official transcript received by program director.
13. Formal venipuncture class must be satisfactorily completed.
14. Satisfactorily write a short paper on professionalism. (Instructions on OSRT meeting form)
15. Students who utilize Federal Financial Aid must complete the Department of Education Exit Interview.

Post Graduation Certification and Licensure

1. American Registry of Radiologic Technologists (ARRT) Examination
2. Ohio Department of Health Radiologic Technology License
3. Other states may or may not have licensure laws or specific requirements. Check with the ARRT at www.arrt.org for more information.

Academic Degree Requirement

Eligibility requirements for ARRT certification in Radiography require candidates to have an associate or more advanced degree from an accrediting agency recognized by the ARRT. The degree does not need to be in the radiologic sciences, and it can be earned

before entering or during the radiography program. Students will not be able to take ARRT certification exam until they complete all degree and radiography program requirements.

Grading Scale

The following grading scale is used:

Scale	Grade	GPA	Definition
93-100%	A	4.0	Excellent
84-92%	B	3.0	Good
75-83%	C	2.0	Satisfactory
67-74%	D	1.0	Unsatisfactory
0-66%	F	0.0	Inadequate/Fail

Students must maintain a "C" grade or better in each academic and clinical course in the Radiologic Technology Program. Students not satisfying this minimal academic requirement will be dismissed from the program.

If a student does not complete all required course assignments by the end of the semester, they will receive an incomplete grade. Incompletes must be resolved within 5 weeks into the next semester or the grades converts to an "F", or failing grade.

Students are counseled as needed throughout the semester regarding academic grades, clinical grades, attendance, tardiness, evaluations, semester GPA, cumulative GPA, and other pertinent information regarding student progress.

Course grades are reviewed by the instructor and students are counseled as needed throughout the semester. At mid-semester the program director identifies students who are at risk of not passing a class and sends an email for them to meet and discuss what approach to take to improve the grade.

Students who are dismissed for academic reasons may utilize the Grievance Procedure Policy.

Clinical Grade Purpose

Students will be given an established number of points for each clinical experience. Each semester clinical grade will be determined by:

1. The number of evaluations turned in by the end of the semester. Four points will be deducted from the established number of clinical points for each missing evaluation.
2. The number of competency evaluations completed by the end of the semester. Eight points will be deducted each week that the competencies are not turned in.
3. The number of failed competency examinations each semester as outlined in the Competency Examination Policy.
4. Observance of program and department policies and practices. Each corrective action will deduct eight points.
5. Only one student clinical evaluation per two-week rotation will be accepted.

Clinical evaluations are reviewed when received by the coordinator. The coordinator meets privately with each student who has a score of 2 or less or there are comments on the evaluation that need to be discussed.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Radiologic Technology Program (Beachwood) will occur after the completion of the first, second, third, and fourth semesters of the program. This will ensure Radiologic Technology students are meeting the 75% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

This policy establishes standards of appropriate attendance, provides a procedure for notification of absence and tardiness, and establishes guidelines for the discipline and improvement of substandard attendance and tardiness. The ethics and attitudes developed through adherence to this policy will help ensure student success in the future, regardless of their place of employment. Excessive tardiness or absenteeism negatively affects patient care and hospital morale and is therefore unacceptable. Failure to comply with these policies will result in corrective action based on a point system, up to and including expulsion from the program as outlined in this policy and the Corrective Action Policy. Please note: records of attendance and corrective action are retained for a period of seven (7) years after graduation and are reviewable for matters pertaining to employment references, dismissal and reinstatement after dismissal.

General Attendance and Timeliness

All time off must be approved by program officials. It is the responsibility of each student to be accountable to the faculty of the school and the clinical preceptors at each clinical site. Please use the following guide for informing the school faculty of any changes to your schedule. Depending on the circumstances, corrective action may result. Please see *Points* section.

Attendance Notification

- If a student is unable to attend class or clinical, they must text both Kevin McDermott (216-678-1753) and Jennifer Bridge (216-633-5301) on their cellphones, and the student must call the clinical site by 7:00 am.
- If a student is running late to class or clinical include an estimated time of arrival.
- If a student is required to leave clinical for lack of work, documentation is required from the clinical preceptor.
- Any PTO to be used in the morning must be requested before midnight the night before, or the student will be considered tardy.

Attendance Book

After approval by a faculty member:

- If a student knows ahead of time they will be using PTO for all or part of the day.
- If a student knows ahead of time they will be absent from class or clinical.
If there is any change to their schedule. Unexpected Circumstance: a. If a student unexpectedly needs to leave clinical early, they must call a faculty member for permission.

Class/Lab Specific Attendance

Class days are 8:00 am – 3:30 pm.

Regular and prompt attendance for Radiologic Technology Program (Beachwood) courses and labs is essential for students to meet the educational challenges and to accomplish learning outcomes of the Radiologic Technology Program (Beachwood). Due to the progressive nature of the individual courses and the program, attendance and punctuality are seen as essential qualities. All classes and labs will begin as scheduled. Please allow for weather, traffic and other circumstances that may cause a delay. In the event of absence or tardy, please see Points section.

1. Students must clock in and out in upon arrival and departure from the classroom/lab.
2. Students are expected to be in the classroom or lab before the official start time.
3. A student will be considered tardy if they are 1 minute late.
4. If a student has more than two unexcused absences from class, the student's grade will be affected. Please see course syllabi for specifics.
5. If a student is absent for 50% or more of a class or lab, they are considered absent for that class.
6. An extended lunch period is considered an incident of tardiness.
7. Severe weather or driving conditions, as deemed by the program director, may be considered an excused tardy.

Clinical Education Specific Attendance

Clinical days are 8:00 am – 3:30 pm.

Attendance and punctuality are seen as essential qualities for your chosen profession. Timeliness is essential at the clinical site as it can be a direct indicator of what type of employee you may become. It is the student's responsibility to inform the school and the clinical preceptor if they are running late, will be absent, or have scheduled time off. Clinical days are seven (7) hours in length, not including the lunch break. Please make time allowances for weather, traffic and other circumstances that may cause a delay. In the event of absence or tardy, please see Points section

1. Students must clock in and out in upon arrival and departure from clinical.
2. Students are expected to be in their assigned area and ready to work at their official start time.
3. If a student leaves the facility for lunch or any other reason, they are is required to clock out and in.
4. Students are not to clock in more than 15 minutes before their scheduled start time at clinical.
5. A student receives .5 point if:
 - They are one minute late.
 - They take an extended lunch period.
 - They leave before the end of their scheduled time.
6. A one-half hour lunch break is required when a student is at the clinical site for more than five (5) hours (some sites allow 45 minutes, must check with clinical site).
7. If a student wishes to stay longer than seven (7) hours, they need to inform the program of their intentions.

8. Students cannot attend clinical in excess of 10 hours per day.
9. Students may not exceed 40 hours in a week of clinical and class time (Monday-Friday).
10. Severe weather or driving conditions, as deemed by the program director, may be considered an excused tardy.

Scheduled Break Weeks

Students have twelve (12) scheduled break weeks over the length of the program as indicated by the academic calendar. Students who wish to take a vacation should utilize break weeks for this purpose.

Holidays

Students are scheduled off clinical and class on the following six (6) holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving (including the day after Thanksgiving), and Christmas. Students are not permitted to be at a clinical during scheduled holidays.

Excused Absences

Bereavement and jury duty are considered excused absences from class or clinical and therefore do not count toward the absences that can cause a course letter grade to drop. Students are responsible for any missed assignments and must make arrangements with their instructor to make up exams and assignments within one week of returning to class. PTO is not used for excused absences from clinical. (follow course syllabus for absences). Clinical time is not required to be made up for bereavement.

Personal Time Off (PTO)

In addition to scheduled breaks and holidays, students are permitted 21 hours of PTO per semester. PTO accumulates and unused PTO will carry over into the next semester. PTO can only be taken in 30-minute increments. Students should reserve PTO for unforeseen personal or family illnesses or emergencies. All PTO requests must be approved by program faculty.

- A. Exceeding PTO will require make-up time at the end of the 5th semester.
- B. Any PTO to be used in the morning must be requested before midnight the night before, or the student will be considered tardy.
- C. For planned absence, PTO must be requested and documented in the attendance book and the student must also notify the clinical preceptor or designee in advance.
- D. Students who wish to leave early, or leave and return to the clinical site, must get verbal permission from program officials by phone.
- E. Interview Day: Students may take up to two (2) separate 3.5 hour blocks for a scheduled Cleveland Clinic radiography interview in the fifth semester. Documentation is required.

Earned Personal Time Off (EPTO)

Students may earn PTO by participating in extracurricular activities related to radiologic technology and/or community service. All activities must be approved by program officials and documentation is required.

1. EPTO can be earned by participating in the following activities. All activities must be completed outside of school hours.
 1. OSRT Annual Meeting (1 hour / each additional educational session attended after meeting requirements)
 2. Blood donation (2 hours / donation)

3. Cleveland Heart Walk
4. Greater Cleveland Food Bank

2. EPTO MAXIMUMS

1. A maximum of fourteen (14) hours per academic year is permitted to be earned.
2. Class officers are required to attend specific events and therefore may earn more than 14 hours per academic year.

Exceeding PTO

Exceeding available PTO will result in a corrective action. Please refer to the Corrective Action Policy for more detail. Exceeded PTO will require make-up time at the end of the 5th semester. Make-up time begins the Monday after the end of the 5th semester from 8:00 am – 3:30 pm each day, until completed.

If a student has less than two hours of total make up time, they may add that time to their final week of clinical with program permission.

School Closure

Class and/or clinical may be canceled by the program director or designee. Closure of the school because of inclement weather or other emergency will be communicated to the students via email. It is the student's responsibility to inform the school of email address changes.

Degree Completion College Courses

Students are never permitted to schedule degree completion courses during class days. Courses should be scheduled at times that do not conflict with class or clinical. If a student must schedule a degree completion course that conflicts with clinical, the course and schedule must be approved by the program director. Any missed time for this purpose will need to be made up at the end of the program.

Make-Up Time

Make-up time for approved LOA, tardiness or exceeding PTO must be completed after the end of the fifth semester. Make-up time will start the Monday after the end of the 5th semester from 8:00 am – 3:30 pm. All program policies will remain in effect until all make-up time is completed and all graduation requirements are met. Make up time can only be performed at primary clinical site. Make-up time less than two (2) hours might be able to be completed during the final week of the program with faculty permission

Students are not eligible to take the ARRT exam until all graduation requirements are met. Students may not exceed 10 hours per day. SODI students must adhere to the 8:00 am – 3:30 pm or the 3:30 pm – 11:00 pm evening rotation schedules and are only permitted to stay to complete a procedure.

Lack of Work

If a student is requested to leave by the clinical site because of lack of work, PTO will not be used. Documentation is needed from the clinical preceptor or designee for each occurrence. A student may be reassigned to another area of the department. VA BENEFITS: Students receiving full time VA educational benefits must maintain a minimum of 22 hours of participation each week.

Points

Points for attendance violations are accumulated accordingly and remain for one (1) rolling year. A rolling year is defined as the 12-month period of active student participation immediately preceding the date of the chargeable occurrence. In the event of a leave of absence (LOA) of more than 30 days, the rolling year will be extended beyond 12 months by the amount of time approved on the LOA. The first two incidents of tardy or failure to swipe in/out are forgiven and will not result in points.

Failure to Clock-In/Clock-Out

For each instance that a student forgets to clock in or out, they must provide time verification from the preceptor. See chart below for points for failure to swipe in and out.

Tardy / Leaving Early	.50
Failure to Clock In or Out	.25

Two Occurrences of No Clock-In/Clock-Out in One Day

The student is required to provide documentation within one week of the occurrence or will be charged with seven (7) hours of make-up time and the incident will be considered a NO CALL / NO SHOW requiring a corrective action. Please refer to the Corrective Actions Policy for more detail. Time verification is still required.

Corrective Action for Points

Corrective action for accumulation of points will be initiated according to the chart below. Please see the Corrective Action Policy for more detail. A corrective action will be initiated each time a student reaches a point level. Any corrective action (including points for attendance) may affect your clinical grade. See the Grading Procedures Policy for more detail.

<u>Corrective Action</u>	<u>Full Time</u>
Documented Counseling	4 points
Written Corrective Action	8 points
Final Written Warning / Suspension	10 points
Dismissal	12 points

No Call/No Show

This applies when a student does not attend class and fails to report off to the school or when a student does not attend clinical and fails to report off to both the school and clinical. Notification received more than two hours after scheduled start time is a "NO CALL/NO SHOW."

Leave of Absence

The Radiologic Technology Program (Beachwood) reserves the right to deny or grant leaves of absence. Students must complete a Leave of Absence form and submit it to the office of the Registrar. Review the school's leave of absence policy for more information.

Tuition and Fees

Individuals who have been accepted as students in the Radiologic Technology Program (Beachwood) are subject to the following tuition and fees:

Application Fee:	\$20.00
Acceptance Fee:	\$300.00 (Non-refundable)

Supplemental Fee:	(Applicable toward first semester tuition)
Semester Tuition:	\$60.00 per semester x 5 semesters (\$300)
Total Program Tuition & Fees:	\$3,150.00 per semester
	\$16,070.00

Estimated Additional Expenses:

OSRT Membership Fee	\$30.00
Textbooks	~\$1,400.00
Registry Review Fee	\$80.00
Uniforms	\$200.00
National Registry Exam Fee	\$225.00
State Licensure Fee	\$60.00

* There is no charge for parking, liability/malpractice insurance, or background screening.

Academic Calendar

Date	Calendar Description
Monday, August 19, 2024	Fall Semester Begins
September 2, 2024	Labor Day – No Class or Clinical
September 5, 2024	Last Day to Receive 75% Tuition Refund
September 17, 2025	Last Day to Receive 50% Tuition Refund
September 17, 2024	Constitution Day – Classes/Clinicals in Session
October 4, 2024	Last Day to Receive 25% Tuition Refund
October 14-18, 2024	Fall Break – No Class or Clinical
November 28-29, 2024	Thanksgiving Break - No Class or Clinical
December 8-13, 2024	Final Exam Week
December 16, 2024 – January 3, 2025	Semester Break - No Class or Clinical
January 6, 2025	Spring Semester Begins
January 23, 2025	Last Day to Receive 75% Tuition Refund
February 4, 2025	Last Day to Receive 50% Tuition Refund
February 21, 2025	Last Day to Receive 25% Tuition Refund
March 3-7, 2025	Spring Break - No Class or Clinical
April 28 – May 2, 2025	Final Exam Week
May 2, 2025	Graduation
May 5-16, 2025	Semester Break – No Class or Clinical
May 19, 2025	Summer Semester Begins
May 26, 2025	Memorial Day - No Class or Clinical
May 31, 2025	Last Day to Receive 75% Tuition Refund
June 8, 2025	Last Day to Receive 50% Tuition Refund
June 20, 2025	Last Day to Receive 25% Tuition Refund
July 4, 2025	Independence Day – No Class or Clinical

August 4-8, 2025
August 11-22, 2025

Final Exam Week
Semester Break - No Class or Clinical

August 25, 2025

Fall Semester Begins

Curriculum Outline

Fall Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
RT101	Patient Care in Imaging	64	0	0	64
TECH101	Radiographic Technique I	64	0	0	64
POS101	Radiographic Positioning & Procedures I	64	0	0	64
POSL101	Radiographic Positioning Lab	0	64	0	64
CL101	Introductory Clinical Experience I	0	0	112	112
TOTAL TERM					368

Spring Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
PHY102	Principles of Radiation Physics	32	0	0	32
TECH102	Radiographic Technique II	32	0	0	32
POS102	Radiographic Positioning & Procedures	32	0	0	32
POSL102	Radiographic Position II Lab	0	64	0	64
CL102	Introductory Clinical Experience II	0	0	336	336
TOTAL TERM					496

Summer Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
ETH101	Healthcare Ethics and Law	24	0	0	24
POS201	Advanced Radiographic Procedures	24	0	0	24
SP201	Special Procedures	24	0	0	24
CL103	Intermediate Clinical Experience I	0	0	336	336
TOTAL TERM					408

Fall Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
BIO201	Radiation Biology & Protection	32	0	0	32
REG201	Registry Review I	32	0	0	32
CL201	Intermediate Clinical Experience II	0	0	448	448
TOTAL TERM					512

Spring Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
RT202	Radiographic Analysis	32	0	0	32
PATH201	Radiographic Pathology	32	0	0	32
REG202	Registry Review II	32	0	32	32
CL202	Advanced Clinical Experience	0	0	448	448

TOTAL TERM 544

TOTAL CLOCK HOURS: 2328

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9780323654401	Patient Care in Radiography with an Introduction to Medical Imaging	Ehrlich, Coakes	10th	2020	Elsevier
9780323356244	Radiographic Imaging and Exposure	Fauber	5th	2016	Elsevier
9780323832793	Merrill's Atlas of Radiographic Positioning & Procedures, 3 volume set	Long, Rollins, Smith	15th	2022	Elsevier
9780323833448	Workbook for Merrill's Atlas of Radiographic Positioning & Procedures	Long, Smith, Curtis	15th	2022	Elsevier
9780323832830	Merrill's Pocket Guide to Radiography	Long, Smith, Curtis	15th	2022	Elsevier
9780323661348	Radiologic Science for Technologists	Bushong	12th	2021	Elsevier
9780323826983	Digital Radiography and PACS	Carter, Veale	4th	2022	Elsevier
9780323827508	Legal and Ethical Issues for Health Professions	Nguyen, J.	5th	2021	Elsevier
9780323825030	Radiation Protection in Medical Radiography	Sherer, Visconti, Rienour, & Hayes	9th	2021	Elsevier
9780323825085	Workbook-Radiation Protection in Medical Radiograph	Sherer, Visconti, Rienour, & Hayes	9th	2021	Elsevier
9780323791298	Radiographic Pathology for Technologist	Kowalczyk	8th	2021	Elsevier

Professional Appearance

Uniforms consist of either navy blue uniform tops (scrub) and white pants (scrub) or white uniform tops (scrub) and navy blue pants (scrub). Warm-up jackets may be included but must be the same color as the uniform tops. Sweaters and sweatshirts are not permitted unless in the classroom.

1. Shirts (tanks, t-shirts, turtlenecks) both long or short sleeved may be worn under the uniform but must be solid white. If wearing a long sleeve

white shirt, the shirt may not extend beyond the wrist and may not have thumbholes. No decals, designs or words are permitted on the undershirts. Crew-neck shirts are highly recommended under V-neck uniform tops. If a short-sleeve t-shirt is worn underneath a short-sleeve uniform top, the sleeves of the t-shirt must not hang below the uniform top sleeves. Three quarter ($\frac{3}{4}$) sleeve length tops are not permitted.

2. **IN CLASS DRESS CODE ONLY:** Same as above but students are permitted to wear Radiology and Cleveland Clinic logo fleece or sweat shirts **only over the uniform**.
3. All shirts and jackets must have the school patch sewn on the left sleeve, two fingers down from the top of the left shoulder seam.
4. Socks must be solid white, black, grey or navy blue.
5. Uniforms must be freshly laundered and wrinkle-free each time they are worn.
6. Shoes must be either white, black, navy or grey athletic shoes, or any combination of these colors. They must not have any different colored stitching, stripes, insignias, etc. and must always be kept clean.
7. The Cleveland Clinic ID badge must be worn at all times, with the name and photo visible, at the chest or collar level.
8. The program-provided dosimeter must be worn at all times when at clinical.
9. Hospital provided scrubs may only be worn in surgery and must be returned before leaving the clinical site.

RADIOLOGIC TECHNOLOGY (MERCY)

<i>Program Snapshot: Radiologic Technology (Mercy)</i>	
Program Director	Devin Johnson, MBA, R.T. (R)(MR)(CT) johnsod60@ccf.org
Location	1320 Mercy Drive NW Canton, Ohio 44708
Clock Hours	2344
Program Length	84 weeks / 21 months
Delivery Method	Residential
Total Cost (tuition + fees)	\$15,000

Overview

The Radiologic Technology Program (Mercy) is a full-time, 21-month (5 terms) certificate-level program consisting of didactic and clinical experiences. Successful completion of the program qualifies graduates to sit for the American Registry of Radiologic Technologists (ARRT) exam to practice as registered radiologic (x-ray) technologists.

Mission Statement

To cultivate lifelong learners who will continue to grow and meet the needs of their community as exceptional radiologic technologists with a student-centered approach to clinical and didactic education.

Objectives

The student will:

- Demonstrate proper positioning skills to obtain optimal radiographic images.
- Demonstrate proficiency in equipment manipulation to obtain quality diagnostic images.
- Demonstrate proper safety and radiation protection principles for the patient, clinical staff, and themselves.
- Use effective written communication skills when dealing with clinical staff and patients.
- Develop professional verbal communication in the health care environment.
- Demonstrate professionalism in the clinical arena.
- Demonstrate the ability to modify routine procedures for non-routine patients.
- Effectively critique images to determine if corrective action is required.
- Acquire critical thinking skills and problem-solving abilities that enhance their clinical experience.

Accreditation

The Radiologic Technology Program (Mercy) is accredited by the Joint Review committee on Education in Radiologic Technology:

Joint Review Committee on Education in Radiologic Technology
20 North Wacker Drive, Suite 2850
Chicago, IL 60606-3182
312.704.5300
Email: mail@jrcert.org

The program's current award is Administrative Probation. General program accreditation information and the current accreditation award letter can be found [here](#).

Faculty

Devin Johnson, MBA, R.T. (R)(MR)(CT), Program Director (full-time)

Education:	Certificate, Radiologic Technology, Mercy Medical Center School of Radiologic Technology Certificate, Computed Tomography & Magnetic Resonance Imaging, Cleveland Clinic School of Diagnostic Imaging B.S., Radiologic Science and Healthcare Administration, Saint Joseph's College of Maine M.B.A., Business Administration – Healthcare Management, Youngstown State University		
Phone:	330.489.1000 ext: 1348	Email:	johnsod60@ccf.org

Emily Hendricks, BS, R.T. (R)(MR)(CT), Clinical Coordinator (full-time)

Education:	A.A.S., Radiologic Technology, University of Akron – Mercy Medical Center B.S., Radiologic Science Administration, Saint Joseph's College of Maine		
Phone:	330.489.1000 ext: 1273	Email:	hendrie4@ccf.org

Facilities

The Radiologic Technology Program (Mercy) has a dedicated classroom in the Cleveland Clinic Mercy Hospital Radiology Department. The classroom has desks, each desk has a computer for accessing our MyLearning LMS and seating for 20 students, a mounted projector with whiteboard, a lectern, and a bookshelf loaded with reference books.

There are no separate dedicated radiographic laboratory facilities for the Cleveland Clinic Mercy Hospital Radiologic Technology Program. General diagnostic rooms in the department of the Cleveland Clinic Mercy Hospital are used by students and faculty to conduct experiments, hold class demonstrations, and to practice radiographic procedures. Included in the general rooms of the Cleveland Clinic Mercy Hospital's Radiology Department are rooms equipped with fluoroscopy as well as a dedicated chest unit. All equipment at all sites is checked for radiation safety according to current federal and or state regulation.

Advisory Board

The Radiologic Technology Program's (Mercy) Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and student, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the program's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, program personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Devin Johnson	MBA, R.T.(R)(MR)(CT)	Program Director, Cleveland Clinic
Emily Hendricks	B.S.,R.T.(R)	Program Clinical Coordinator, Cleveland Clinic
Chris Donato	B.S.,R.T.(R)	Senior Director of Operations (Southern Region), Cleveland Clinic
Juanita Schmucker	B.S.,R.T.(R)	Radiology Department Manager, Cleveland Clinic
Nicole Bradford	MHA, R.T.(R)(CT)	Aultman College Radiography Program Faculty (Assistant Professor)
Naomi Stiffler	BS, R.T.(R)	Aultman College Radiography Program Faculty (Instructor)
Hope Casseday	AS, R.T.(R)	External Staff Technologist

Technical Standards

1. Candidates must have good eyesight either naturally or through correction. They must be able to see the printed words in a radiographic textbook and be able to read and accurately interpret the numbers on a radiographic technique chart.
2. Candidates must have the ability to hear instructions and be able to respond to verbal requests by patients/customers.
3. Candidates must be able to lift a minimum of thirty (30) pounds and possess the ability to support up to 175 pounds. Radiographers must assist, support and move patients from wheelchairs and carts onto radiographic examination tables which requires the use of their backs and muscles.
4. Radiographers work while standing, sometimes for hours. Candidates must be able to move around and stand for long periods of time.
5. Radiographers must verbally instruct patients and be able to express concern and empathy for them. Candidates must possess good verbal and nonverbal communications skills as evidenced from the application and interview process. Radiographers must perform data entry with dexterity and accuracy.
6. Candidates must be physically and mentally capable of fulfilling the objectives of the radiography program. The school will make reasonable accommodations to assist a student with a disability to advance through the program. However, candidates must be aware that the school is located on the third floor of a building with no elevator. Candidates must have sensory function adequate for patient assessment and care. They must possess the physical status needed to provide all aspects of care in a safe manner.

Admissions Requirements

The following shall be used for determining the acceptability of a candidate for admission to the Cleveland Clinic Mercy Hospital's Radiologic Technology Program.

The student must:

1. Be a high school graduate or equivalent
2. *Have taken college level courses prior to applying.
3. Have received a grade of "C" or higher in all courses taken.

*(These courses are offered at Kent State University, Stark Campus and other universities as well.)

Prerequisite Courses:

- Anatomy & Physiology I
- Anatomy & Physiology II
- Medical Terminology

Readmission Policy

Any student who previously withdrew from the program, in good standing, may apply for readmission. Only one readmission to the Radiologic Technology Program (Mercy) will be granted. Readmission is not guaranteed. Any student who was dismissed from the program is not eligible to reapply for the program.

The student will follow the application process that begins on Sept. 1st of each year. The following is the procedure for readmission:

- Send a written readmission request to the program director before the application deadline of Feb. 1.
- Provide written documentation to the Radiologic Technology Program (Mercy) Director stating the reason(s) for withdrawal and indicate the actions the student has followed to ensure success in the program if readmitted.
- The Radiologic Technology Program (Mercy) Director will notify the student by mail and email when and where the interview with the admissions panel will be held.
- After the interview with the admissions panel has concluded, the Radiologic Technology Program (Mercy) Director will notify the student by mail and email of their readmission status.

Application Process

The following materials must be received by the program before an application can be considered:

1. Completed application form
2. Transcripts from all colleges attended
3. Two letters of recommendation
4. \$20.00 application fee; the application fee is non-refundable.

Applications will be submitted through the Campus Café system.

One class of students will be admitted to the Radiologic Technology Program (Mercy) in August of each year.

Completed applications must be submitted by February 1st along with the \$20.00 application fee to be considered for admittance to the Radiologic Technology (Mercy) Program. The applicant will be interviewed by an admissions panel and will tour Cleveland Clinic Mercy Hospital's Radiology Department that same day.

Admissions Panel

The admissions panel consists of:

- The Program Director
- The Clinical Coordinator
- A member of the Faculty
- At least 2 other designates

All applicants interviewed for admission will be informed of the Admission Panel's decision to accept or deny them admission to the Radiologic Technology Program (Mercy).

All applicants not meeting admission requirements shall be notified by the Program Director via telephone or letter.

Final class selection will be made by approximately April 15 of the year in which you are applying.

Once accepted, a \$200.00 non-refundable acceptance fee (which is deducted from your tuition) is required to hold your spot in the program.

Graduation Requirements

In order to be eligible for graduation, the student must:

- Satisfactorily complete all clinical requirements
- Have a satisfactory GPA clinically
- Have a satisfactory GPA didactically
- Be in "Good Standing"
- Demonstrate appropriate use of verbal and written medical language
- Demonstrate knowledge of human anatomy and physiology
- Attend to a patients' needs with concern and empathy
- Properly operate radiographic equipment and accessories
- Properly position the patient for radiographic procedures
- Adapt exposure factors for patient pathology
- Understand the use of technical factors to obtain a quality radiograph with minimal radiation exposure
- Process images properly
- All required college-level courses for degree completion must be completed and official transcript received by program director.
- Have paid all costs, books, and tuition due to the program

Grading Scale

Grades are computed every semester for each course based upon the following grading system:

Scale	Grade	GPA	Definition
96-100%	A	4.0	Excellent
93-95%	A-	3.7	Excellent
90-92%	B+	3.3	Good
87-89%	B	3.0	Good
84-86%	B-	2.7	Good
81-83%	C+	2.3	Average
78-80%	C	2.0	Average
75-77%	C-	1.7	Average
69-74%	D	1.0	Poor
0-68%	F	0.0	Failing

- In the event a student fails a course with a **(D)**, either clinical or didactic, the following will occur:
- The student is placed on probation for the following semester. The following semester does not include the Summer Clinical Session. At the end of the probationary period the student's progress will be evaluated by the faculty of the Radiologic Technology Program (Mercy). All courses, didactic and clinical, must be successfully completed to prevent dismissal from the program.
- In the event a student fails a course with an **(F)**, either clinical or didactic, the student will be automatically terminated from the Radiologic Technology (Mercy) Program.
- Checks and balances are built into the curriculum to assess the students' progress. These checks and balances will then allow the faculty to assist the student in a timelier manner to get them back on track or investigate ways to allow the student to be successful in the course.
- Documentation of didactic and clinical interventions will be kept in the student's permanent record.
- Any student not maintaining at least the minimum acceptable grade average in both didactic and/or clinical will be placed on probation. The minimum acceptable didactic grade is 75% and the minimum acceptable clinical grade is 80%.
- One probation will be given for each course grade that does not meet the minimum acceptable grade. The probationary period is defined as **1 semester** in length, not to include the Summer Clinical Semester. At the end of the probationary period, the student will be re-evaluated to determine whether sufficient progress has been made to prevent dismissal.
- Any student receiving two (2) probations during the 2 years of training will be **automatically terminated**.

Satisfactory Academic Progress (SAP)

Qualitative progress evaluations for the Radiologic Technology Program (Mercy) will occur after the completion of the first, second, third, and fourth semesters of the program. This will ensure Radiologic Technology students are meeting the 75% minimum. If students are not meeting the qualitative measurements established for the program, there may be disciplinary actions. See SOHP SAP policy for further information.

Attendance Policies

It is the responsibility of the student to maintain good attendance habits in preparing for the work force. The following policy has been established in accordance to the students' attendance.

All scheduled classes must be attended.

It is the student's responsibility to arrange with the course instructor to make-up of any class assignments or exams missed due to illness. Any exams not made up according to the stated arrangement will be automatic "F"s. Emergency arrangements may be discussed with the Program Director.

Class assignments and tests missed due to unexcused absences cannot be made up.

Reporting Absences or Tardiness

When reporting an absence, the student must notify the Program Director and the Clinical Coordinator via "GROUP TEXT", prior to their start time. If the student does not receive a response to their text within 1 hour of sending the "group text", the student should call extension **1273 or 1348** Monday – Friday to report the absence.

If a "Group Text" is not received by the Program Director **and** the Clinical Coordinator the absence that was reported will **NOT** be honored. Demerits will be issued based on the infraction.

Absences count as 1 incident. Absences reported after the start time will count as 1½ incidents.

An absence of three (3) consecutive scheduled days **without** notification shall be considered voluntary termination.

Extended Illness

The following provision is made for extended illness not for use with habitual absenteeism: An absence of sixty (60) days or more during the twenty-one (21) month training period will disqualify the student from graduating with the class. The student will be asked to complete an additional six (6) months of training before the Program Director will sign for the registry application.

One (1) verbal warning **per year** will be given for the 1st occurrence due to either a tardy, no badge, or not clocking in or out. The student would still have time deducted from their personal time but would not receive points off of their clinical grade for that semester. They would not qualify for a merit. Any additional occurrences would result in time deducted and 2 points off of the clinical grade; the equivalent to ½ of an incident.

All time that is deducted shall be documented in accordance with the following breakdown:

1 – 15 minutes = .25 of an hour

16 – 30 minutes = .50 of an hour

31 – 45 minutes = .75 of an hour

46 – 60 minutes = 1.00 of an hour

Call-Off Policies

Call off on a clinical day:

8 hours are deducted from personal time for time missed. If you call off on a Monday clinical day you will have 4 hours deducted from your PTO for the time missed. This will count as 1 incident.

Call off on class day:

number of hours according to semester schedule for that day will be deducted from personal time consecutive days off for the same illness will count as 1 incident with no additional demerit points added.

Late call off

Student did not call off at least 1 hour prior to start of shift, **8 hours** will be deducted from personal time and will be counted as 1 ½ incidents.

Time Off

Pre-approved time off:

A student may request to use personal time without receiving any incidents or points against their grade. The student can request the time off and have it approved by the Director of the program or the Clinical Coordinator. A minimum of 24 hours' notice is required for the requested time off. The student will be required to fill out a "request for time off" form.

If personal time is used without pre-approval, time would be deducted, and incidents would be given according to policy.

Clocking In and Out

- If a student forgets to clock in, this will count as a 30 minute tardy (½ incident) and a 2 point demerit will be assessed to the student's clinical grade.
- If a student forgets to clock out, this will count as ½ an incident with 30 minutes being deducted from the student's personal time. Also, a 2 point demerit will be assessed to the student's clinical grade.
- Both incidents mentioned above would disqualify the student from earning a merit for perfect attendance.

No Badge

If the student does not have their badge to clock in they will be required to go to security and purchase a new badge or to leave and go get their badge. They would then clock in after they get their badge. If they clock in late, they will be counted tardy.

Personal Time Off (PTO)

The student is allotted 80 hours of personal time per 21 month program.

- This time can be used for illness, personal appointments, doctor visits, etc.
- Any time used above 80 hours will be an automatic termination from the program. Any extenuating circumstances, such as pregnancy, LOA, or COVID-19, will be given special consideration by the Advisory Committee.
- Any disciplinary action(s) that would result in a student suspension would require that the student's time off, due to that suspension, be taken from the student's 96 hours of personal time.

Excessive Absences and Tardiness

Excessive absence and/or tardiness are grounds for disciplinary action. Excessive absence

is defined as three (3) or more incidents within 30 days or five (5) or more incidents within 90 days. Consecutive days missed for the same illness constitute one (1) incident.

Number of Incidents	Reason
½	Tardy
½	Not clocking in or out
1	Late without working at least 4 hours of shift
1	Call-off within procedure guidelines (No Points)
1½	Late call-off not within procedure guidelines
2	Failure to call-off or appear for shift

Return to School Certificate

The student must obtain a doctor's excuse to return to school after five (5) consecutive days of illness. The note must certify fitness to return to clinical rotation without restrictions.

NOTE: The Program Director reserves the right to request a physician's note from a student after two (2) consecutive days of illness.

Clocking In/Clocking Out

Students are expected to clock in and out every day using Trajecsyst. Students will clock in using their cell phones, one of the 4 tablets available in the Radiology Department or a Department computer that provides internet access. Students are permitted to clock in when they arrive but cannot perform exams until the actual assigned start time for the area they are assigned.

On class days the students may clock in to Trajecsyst using their cell phones, tablets, or computers.

Students are permitted to leave their area 4 minutes prior to the end of their shift to go the locker room before leaving. Students who are in areas where they need to change into surgical scrubs are permitted leave their area 10 minutes before the end of the shift to go to their lockers and change clothes. However, students should not clock out prior to their end time.

Early Clocking Out

Clocking out early without prior approval is considered grounds for progressive corrective action.

Missed Clocking In/Missed Clocking Out

Students are expected to clock in and out at their appointed times. If a student forgets to clock in, the incident will count as a **30-minute tardy and 2 points will be taken off their clinical grade**. If a student forgets to clock out, the incident will count as **30 minutes of personal time and 2 points off the clinical grade**. If the student forgets or loses their ID badge; the student will be required to go to security and purchase a new badge or go home and get their badge. Students are not permitted to be on site without a badge. Students will clock in when they are prepared for clinical or class not before. **Any student that clocks in or out for another student is subject to termination.**

One verbal warning **per year** will be given for the 1st occurrence due to either/or tardy, no badge or not clocking in or out. The student will have time deducted from their personal time but would not receive points off their clinical grade for that semester. They would not qualify for a

merit due to the verbal warning.

Recording Overtime

Overtime will begin to accumulate when the clock out time is eight (8) minutes or more past the students assigned ending time for that day. Overtime is not given for time prior to the start of shift.

Overtime can be used at any time with approval from the Program Director or Clinical Coordinator. This is separate from personal time and does not count against your attendance.

Students cannot call in the morning and use overtime to avoid being tardy. The instructors reserve the right to question any overtime to verify it is related to appropriate clinical participation.

Over Time (OT)

8 – 15 minutes	= .25 of an hour
23 – 30 minutes	= .50 of an hour
38 – 45 minutes	= .75 of an hour
53 – 60 minutes	= 1.00 of an hour

Leave of Absence

A student may request a leave of absence through the office of the Registrar. Review the school's Leave of Absence policy for more information.

Weekend Call-Offs

If a student calls off on the weekend or leaves early without prior approval from the Program Director or Clinical Coordinator, the student will have this time deducted from their personal time. Any call-offs on a weekend are required to be made up on another weekend at the discretion of the Program Director and/or Clinical Coordinator. Once the student makes up the weekend shift the time removed for the missed weekend shift will be added back to the student's personal hours.

Vacations

Students have twelve (12) scheduled break weeks over the length of the program as indicated by the academic calendar. Students who wish to take a vacation should utilize break weeks for this purpose.

Holidays

Students are scheduled off clinical and class on the following six (6) holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving (including the day after Thanksgiving), and Christmas. Students are not permitted to be at a clinical during scheduled holidays.

Professional Days

Sixteen (16) hours is allotted to each student as "Professional Days". The hours may be used in either 4 or 8 hour increments. If a student chooses to use these "Professional Days" they must submit a copy of a signed registration form or program from the professional event to the Program Director upon the student's return from that event.

These days are reserved for professional use only and will be governed by the rules set forth above.

Tuition and Fees

The collection of fees and tuition shall be as follows:

- (1) Upon acceptance, the student must pay a \$300.00 non-refundable acceptance fee.
- (2) The remainder of the tuition is to be paid per semester (4 semesters). Each Semester has a tuition requirement of \$3,750.00. Within the first week of each semester tuition must be paid to continue with the semester.
- (3) All tuition and fees must be paid in full prior to graduation to receive a diploma and approval for examination registration with the ARRT.

Program Tuition:	\$3,750.00 per semester (\$15,000.00)
<i>Additional Fees include:</i>	
Application Fee	\$20.00
Acceptance Fee (deducted from tuition, non-refundable)	(\$300.00)
Trajecsys due during first week of classes (deducted from tuition)	(\$150.00)
<u>Estimated Additional Expenses</u>	
Seminars (OSRT)	\$250.00
Clover Learning & Book Fee Estimate	\$1,000.00
Uniforms & Shoes	\$200.00

Other Fees

Students shall be responsible for paying for the following:

- Uniforms to meet the dress code
- Maintaining uniforms in accordance with the dress code
- Textbooks, Online LMS (MROs if utilized) for the online content utilized in the program. This is paid by the semester.
- Notebooks, paper, and other school supplies
- Housing and living expenses for the duration of the Radiologic Technology Program (Mercy)
- Optional professional fee; Ohio Society of Radiologic Technologists (OSRT) American Society of Radiologic Technologists (ASRT)

Academic Calendar

Date	Calendar Description
August 19, 2024	Fall Semester Begins
September 2, 2024	Labor Day – No Class or Clinical
September 5, 2024	Last Day to Receive 75% Tuition Refund

September 17, 2024	Last Day to Receive 50% Tuition Refund
September 17, 2024	Constitution Day – Classes/Clinicals in Session
October 4, 2024	Last Day to Receive 25% Tuition Refund
October 14-18, 2024	Fall Break – No Class or Clinical
November 28-29, 2024	Thanksgiving Break - No Class or Clinical
December 8-13, 2024	Final Exam Week
December 16, 2024 – January 3, 2025	Semester Break - No Class or Clinical

January 6, 2025

Spring Semester Begins

January 23, 2025	Last Day to Receive 75% Tuition Refund
February 4, 2025	Last Day to Receive 50% Tuition Refund
February 21, 2025	Last Day to Receive 25% Tuition Refund
March 3-7, 2025	Spring Break - No Class or Clinical
April 28 – May 2, 2025	Final Exam Week
May 2, 2025	Graduation
May 5 -16, 2025	Semester Break – No Class or Clinical

May 19, 2025

Summer Semester Begins

May 26, 2025	Memorial Day - No Class or Clinical
May 31, 2025	Last Day to Receive 75% Tuition Refund
June 8, 2025	Last Day to Receive 50% Tuition Refund
June 20, 2025	Last Day to Receive 25% Tuition Refund
July 4, 2025	Independence Day – No Class or Clinical
August 4-8, 2025	Final Exam Week
August 11-22, 2025	Semester Break - No Class or Clinical

August 25, 2025

Fall Semester Begins

Curriculum Outline

Fall Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
RT101	Patient Care in Imaging	64	0	0	64
TECH101	Radiographic Technique I &	64	0	0	64
POS101	Radiographic Positioning Procedures I	64	0	0	64
POSL101	Radiographic Positioning Lab	0	64	0	64
CL101M	Introductory Clinical Experience I	0	0	256	256
TOTAL TERM					512

Spring Term

Clock Hours

Course	Course Title	Lecture	Lab	Clinical	Total
PHY102	Principles of Radiation Physics	32	0	0	32
TECH102	Radiographic Technique II	32	0	0	32
POS102	Radiographic Positioning & Procedures	64	0	0	64

POSL102	Radiographic Positioning Lab II	0	64	0	64
CL102M	Introductory Clinical Experience II	0	0	256	256
TOTAL TERM					448
Summer Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
ETH101	Healthcare Ethics and Law	24	0	0	24
POS201	Advanced Radiographic Procedures	24	0	0	24
SP201	Special Procedures in Radiologic Technology	24	0	0	24
CL103M	Intermediate Clinical Experience I	0	0	384	384
TOTAL TERM					456
Fall Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
BIO101	Radiation Biology & Protection	32	0	0	32
REG201	Registry Review I	32	0	0	32
CL201M	Intermediate Clinical Experience II	0	0	384	384
TOTAL TERM					448
Spring Term		Clock Hours			
Course	Course Title	Lecture	Lab	Clinical	Total
PHY102	Radiographic Analysis	32	0	0	32
PATH201	Radiographic Pathology	32	0	0	32
REG202	Registry Review II	32	0	0	32
CL202M	Advanced Clinical Experience	0	0	384	384
TOTAL TERM					480
TOTAL CLOCK HOURS:					2344

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9780323654401	Patient Care in Radiography with an Introduction to Medical Imaging, 10th edition	Ehrlich, Coakes	10th	2021	Elsevier
9780323356244	Radiographic Imaging and Exposure	Fauber, Terri	6th	2022	Elsevier
9780323832793	Merrill's Atlas of Radiographic Positioning & Procedures	Long, Rollins, Smith	15th	2023	Elsevier
9780323833448	Workbook for Merrill's Atlas of Radiographic Positioning & Procedures	Long, Rollins, Smith	15th	2023	Elsevier
9780323832830	Merrill's Pocket Guide to Radiography	Long, Rollins, Smith	15th	2023	Elsevier

9780323661348	Radiologic Science for Technologists	Bushong, Stewart	12th	2021	
9780323826983	Digital Radiography and PACS	Carter, Veale	4th	2023	Elsevier
9780323827508	Legal and Ethical Issues for Health Professions	Nguyen, Jamie	5th	2024	Elsevier
9780323825030	Radiation Protection in Medical Radiography	Sherer, Visconti, Rienour, & Hayes 9th	9th	2022	Elsevier
9780323825085	Workbook for Radiation Protection in Medical Radiography	Sherer, Visconti, Rienour, & Hayes 9th	9th	2022	Elsevier
9780323791298	Radiographic Pathology for Technologist	Kowalczyk, Nina	8th	2022	Elsevier

Professional Appearance

Uniforms

Uniforms must be either navy blue scrub pants and white scrub shirts or white scrub pants and navy-blue scrub shirts with no colored designs. Jeans, sweatpants, or sweatshirts are not permitted. White t-shirts are not permitted as uniform tops but may be worn under your scrub tops (as long as the short white sleeves are not visible). White (only) long sleeve shirts may be worn under your scrub tops (whether you are wearing a white or navy-blue scrub shirt). Scrub tops must be long enough to cover waist band of pants when reaching over head or bending.

Belly shirts or tight-fitting shirts are not permitted. Again, if shirts are worn under scrub tops, they must be white with no images, designs or text. A navy-blue or white lab coat may be worn (must match color of scrub top). All students will be issued scrubs to wear during the surgical and IR rotations, shirts under surgical scrubs must be short sleeved and white. These scrubs are to be laundered by the hospital and not taken home. Students are to wear their own clothes and change into scrubs when they arrive and change back into their own clothes before leaving.

Shoes

Shoes must be white, or as white as possible and have no colored designs or trim. If these are difficult to find, minimal colored designs may be approved by the instructors.

Students not complying with the dress code will be warned verbally and any further violations will result in a demerit. Depending on the violation, students may be sent home to change and the time will be subtracted from their personal time.

AREA OF STUDY

CLINICAL PASTORAL EDUCATION INTERNSHIP

<i>Area of Study Snapshot: Clinical Pastoral Education Internship</i>	
Program Director	Andy Burnette, D. Min., BCC, ACPE Certified Educator burneta6@ccf.org
Location	Q Building 9500 Euclid Ave. Cleveland, OH 44195
Clock Hours	400
Program Length	11-17 weeks / 3-5 months
Delivery Method	Blended
Total Cost (tuition + fees)	\$550 / \$400 (returning students)

Overview

The Clinical Pastoral Education (CPE) Internship is an Association for Clinical Pastoral Education (ACPE) accredited graduate-level pastoral education area of study that began in 1988. The CPE Internship offers intensive and standard units, ranging from 11-17 weeks. CPE provides clinical education in spiritual care for religious/spiritual professionals, including persons seeking certification as chaplains. The internship may support interns' preparation in a variety of roles, but is not designed to prepare interns for a specific occupation. Interns receive an individual certificate for each unit completed, but there is no universal number of units required or overarching certificate for completion of multiple units.

The weekly training consists of clinical time with patients, verbatim seminars, didactic sessions, interpersonal relations group (IPR), and individual supervisory consultation. Participants receive an evaluation and certificate at the completion of each unit. Applicants are not required to be ordained to be considered, but preference is given to those with some theological education from an institution whose accreditation is recognized by the Council for Higher Education Accreditation (CHEA). Applications are accepted year-round.

Mission

To nurture and train clergy and laity who will show excellence in clinical pastoral services, rigor in self-reflective praxis, and thirst for ongoing learning and health.

Objectives

The objective of the Clinical Pastoral Education Internship is to provide the opportunity for interns to grow personally and professionally as providers of spiritual care. Graduates of the CPE Internship have been part of many professions including pastors, rabbis, imams, and other religious professionals; leaders in non-theist traditions; hospital, prison, police, and corporate chaplains; medical professionals; and more. As such, the program is non-matriculating and avocational.

Accreditation

The Clinical Pastoral Education Internship is accredited by The Association for Clinical Pastoral Education, Inc. (ACPE)

The Association for Clinical Pastoral Education, Inc.
1 Concourse Parkway, Suite 800
Atlanta, GA 30328

Phone: 404-320-1472
Website: www.acpe.edu

Faculty

Andy Burnette, D.Min., BCC, ACPE Certified Educator, Program Director (full-time)

Education: B.S., Mass Communication, University of Evansville
M.A., Divinity, Oakland City University
D.Min., Ministry, Pacific School of Religion

Phone: 216-444-2789 (office) Email: burneta6@ccf.org
216-386-2515 (cell)

Facilities

One conference room (J5-002) is reserved for CPE Internship classes. CPE interns have a dedicated work area in either the Regional Offices or the Spiritual Care office with several computer workstations and Internet access. The center has a dedicated on-call/sleep room (TT-503) with a bed, computer workstation, television, bathroom, and shower for interns and staff when they are on-call overnight and on weekends at the main campus. CPE interns at every Placement Site have opportunities to attend grand rounds in Spiritual Care, Healing Services, Bioethics, and numerous other areas. Trained Staff chaplains, who review the ACPE required materials before each unit, are assigned as preceptor mentors to CPE interns and assist with clinical work and pastoral practice.

Advisory Board

The Clinical Pastoral Education Internship Advisory Board serves to address and provide insight on a broad range of topics including the program's mission, goals and objectives, curriculum, outcomes, program strengths and areas for improvement in preparing graduates, current and projected community needs for graduates in the field, annual evaluation of program effectiveness, and interns, graduate, clinical externship affiliate, and employer feedback.

The Advisory Board consists of in-field specialists who are committed to assisting the area of study's leadership and educators in fulfilling education objectives and improving program effectiveness. The Advisory Board meets at a minimum of once per year. Distribution of meeting minutes to the Advisory Board, area of study personnel, and interested parties is documented prior to the next scheduled meeting.

Member	Credentials	Title
Anissa Glaser-Bacon	M. Div.,	Minister for Ministers in Specialized Settings and Professional Endorsement Coordinator, UCC
Travis Gullett	MATS, MD.	Physician Emergency Medicine, Cleveland Clinic
Rev. Jon Dodson	BCC	Laurel Lake Retirement Community, Chaplain
Rev. Jared Gadomski Littleton	M,Div	Chaplain, Cleveland Clinic
Jennifer Johnson	LISW	Caring for Caregivers, Training Specialist, Cleveland Clinic

Rev. Brent Raitz	D. Min., BCC,	Director of Spiritual Care, Cleveland Clinic
Rabbi Sustan Stone	MAHL, DDiv, BCC	Director of Spiritual Care, Cleveland Clinic
Rev. Celestia Gibson	M. Div.,BCC	Director of Spiritual Care, Cleveland Clinic

Technical Standards

Sensory and Motor Skills

Interns and candidates for CPE Internship admission should be able to:

1. Be in a stationary position for an extended period of time.
2. Be able to see clearly enough to discern written communication and hear well enough to comprehend conversations.
3. Be mobile to various clinical units throughout the campus where you are assigned. You can expect to navigate five miles or more per eight hours.
4. Use a computer for assignments and patient charting using the Epic System.

Communication

Interns and candidates for CPE Internship admission should be able to:

1. Possess excellent verbal and written communication skills in English.
2. Speak clearly.
3. Hear sufficiently.
4. Produce and transmit patient information in oral and written format to members of the healthcare team.
5. Communicate with patients effectively with compassion and empathy.
6. Possess graduate-level reading skills to accomplish curricular requirements.
7. Provide effective Spiritual Care to patients.

Admission Requirements

The Clinical Pastoral Education Internship provides professional education for the provision of spiritual care. Applicants will usually be ordained or endorsed, have taken vows in a religious order, or have completed at least one year of graduate level theological studies. In the admission process, applicants should be able to demonstrate maturity, development, or potential in each of the criteria. Serious deficiency in any of the criteria would be grounds for a decision not to admit the applicant.

Formal Criteria

1. *Educational Requirements:* completion of at least a college baccalaureate degree and several courses in theology, scripture, spiritual care and/or behavioral sciences, including development (age-specific) theory.
2. *Satisfactory Health:* freedom from health problems that would preclude patient contact (e.g., communicable disease) or meeting other program requirements, such as navigating a minimum of two miles per day.
3. Only non-smokers will be admitted into the Clinical Pastoral Education Internship in accordance with Cleveland Clinic Policy as a non-smoking workplace.
4. Evidence of health insurance coverage
5. *Completed Application:* ACPE application face sheet and written materials on subjects described in application questions.
6. *Admission Interview:* to be conducted at Cleveland Clinic after application is received. Exceptions for single units may be arranged when the applicant cannot come to the Cleveland Clinic.
7. References available for immediate contact.
8. A criminal background check will be conducted during onboarding through Silk Road.
 - To assure compliance with specific state licensure, certification examination eligibility or credentialing, students who have been previously convicted of a felony or have pending litigation should schedule an appointment with the program director prior to enrolling. Failure to do so may affect their program eligibility or may result in the students' inability to practice upon graduation.
9. \$20 application fee payment

Admissions Process

The Clinical Pastoral Education Internship begins with the application and interview process before students are accepted. It is assumed that any candidate for training will show exceptional potential for skills in spiritual care and self-directed learning.

When an inquiry about the CPE Internship program is received, the inquirer will be given a letter, email or phone call acknowledging the inquiry with guidance to finding the following on our web site:

- A brief description of Cleveland Clinic and the program in which the inquirer is interested
- Admissions procedures
- Admission criteria
- ACPE application form
- Fee Policy
- Objectives for that program

When an application is received, the applicant will be sent a letter or email which:

- Acknowledges the receipt of the application
- Initiates arrangements for interview
- Notifies the applicant of the date admissions decisions will be made

An incomplete application may or may not receive a reply.

An admissions interview will be conducted by the Director of CPE and/or another certified ACPE Educator and a team of others as determined by the educator.

Decisions will be made by the Director of CPE in consultation with the other interviewers.

Notification of admissions decisions will be made promptly.

Notification of Acceptance

Those accepted to the Clinical Pastoral Education Internship will have 21 days to indicate their intentions to enroll by:

- paying the program fee, paying a deposit toward the fee, or giving written notification of the third party who will be paying the fee (such as a seminary, which will include agreement to pay if the student fails or withdraws);
- providing evidence of health insurance coverage;
- and completing the consent forms and returning them with the student's acceptance.

Unit Credit Requirements

Student Achievement is based on demonstration of the Outcomes and Indicators that are assigned to each level of CPE.

Full Credit and Advances to the Next Level of CPE (Pass and Proceed)

To receive 1 credit and advance to the next level of CPE, the intern must successfully complete the 400-hour requirement, demonstrate achievement of a *minimum* score of 80% for the assigned indicators of the level on the standardized evaluation, and meet all local requirements. This level of achievement will be indicated with an asterisk* as part of the certificate title and denoted at the bottom of the certificate, indicating eligibility to advance to the next level.

Full Credit but DOES NOT Advance to the Next Level of CPE (Pass and Repeat)

An intern who demonstrates a level of achievement between 70% – 79% for the assigned indicators of the level on the standardized evaluation, successfully completes the 400-hour requirement, and meets all local requirements will receive 1 credit for the unit. The student will not be eligible to advance to the next level of CPE. The intern will receive a certificate for the completion of the unit. At the discretion of the program, the student may repeat the current level.

Half Credit but DOES NOT Advance to the Next Level of CPE (Half-Pass and Repeat)

A student who demonstrates a level of achievement between 50% – 69% for the assigned indicators of the level on the standardized evaluation, successfully completes the 400-hour requirement, and meets all local requirements will receive .5 credit for the unit. The student will not be eligible to advance to the next level of the CPE Internship. The student will receive a certificate for the completion of the unit. At the discretion of the Clinical Pastoral Education Internship, the student may repeat the current level.

Zero Credit

An intern who demonstrates a level of achievement less than 49% for the assigned indicators of the level on the standardized evaluation or does not complete the 400-hour requirement or does not meet all local requirements will receive 0 credit for the unit. The intern will not be eligible to advance to the next level of CPE. At the discretion of the Clinical Pastoral Education Internship, the student may repeat the current level.

Grading Scale

The Clinical Pastoral Education Internship uses the Pass/Fail grading scale outlined above in the Graduation Requirements section.

Scale	Grade	Definition
50-100%*	P	Pass
0-49%	F	Inadequate/Fail

*Please review the *Unit Credit Requirements* to determine if the “Pass” grade qualifies the intern to proceed or repeat the unit.

Attendance Policies

Students are expected to attend all CPE Internship education days. Exceptions may be granted by the educator in case of family emergency or illness. If an intern misses clinical hours, it is their responsibility to work with the educator to reschedule those hours. Interns may not pass with fewer than 250 clinical hours and 100 educational hours per CPE unit.

Tuition and Fees

Tuition is \$550 per unit, payable (less the deposit) on the first day of class. Payment plans can be arranged by request. For interns whose tuition will be paid by their seminary or congregation, an invoice will be mailed.

Fees

Application Fee (non-refundable): \$25.00

*Acceptance Deposit: \$50.00

**Due within two weeks of acceptance and applied toward tuition. If a third party (e.g. school or church) is paying the program fee, a letter from the guarantor is required.*

Tuition

Summer Intensive Unit Tuition: \$550.00

Fall or Spring Extended Unit Tuition: \$550.00

Subsequent Units (either Summer or Extended) Tuition: \$400.00

Academic Calendar

Date	Calendar Description
September 3, 2024	Fall Interns Begin
September 3, 2024	Full Tuition Payment Due
September 17, 2024	Constitution Day – Classes/Clinicals in Session
September 19, 2024	Last Day to Receive 75% Tuition Refund
September 29, 2024	Last Day to Receive 50% Tuition Refund
October 15, 2024	Last Day to Receive 25% Tuition Refund
November 7, 2024	Mid-Unit Evaluations

December 19, 2024

Final Evaluations

January 9, 2025

Graduation

January 16, 2025

Spring Interns Begin

January 16, 2025

Full Tuition Due

January 29, 2025

Last Day to Receive 75% Tuition Refund

February 7, 2025

Last Day to Receive 50% Tuition Refund

February 21, 2025

Last Day to Receive 25% Tuition Refund

February 27, 2025

Mid-Unit Evaluations

April 17, 2025

Final Evaluations

TBD

Graduation

May 27, 2025

Summer Interns Begin

May 27, 2025

Full Tuition Due

June 6, 2025

Last Day to Receive 75% Tuition Refund

June 13, 2025

Last Day to Receive 50% Tuition Refund

June 24, 2025

Last Day to Receive 25% Tuition Refund

TBD

Mid-Unit Evaluations

August 6, 2025

Final Evaluations

TBD

Graduation

Curriculum Outline

The Clinical Pastoral Education Internship consists of 400 hours per unit, with 250 of those hours being clinical spiritual care of patients, 100 being education, and 50 to be used at the educator's discretion. Hours of education consist of verbatim seminars, Interpersonal Relations Group, and didactic seminars. Additionally, interns have one hour of individual supervision with their Certified Educator/Certified Educator Candidate each week.

Textbooks

ISBN	Title	Author	Edition	Year	Publisher
9781469667607	Chaplaincy and Spiritual Care in the Twenty-First Century	Cadge, W. and Rambo, S.		2022	Chapel Hill, NC: University of North Carolina Press
9781250212849	Permission to Feel: The Power of Emotional Intelligence to Achieve Wellbeing and Success	Brackett, M.		2019	Celadon Books

9798889833048	The Enneagram for Black Liberation: Return to Who You Are Beneath the Armor You Carry	Agorom, C		2022	Minneapolis: Broadleaf Books
9782920932210	Heal Your Wounds and Find Your True Self: Finally a Book That Explains Why It's So Hard Being Yourself	Bourbeau, L.		2019	Prévost, Quebec: Les Editions E.T.C.
9780399592522	Dare to Lead: Brave Work. Tough Conversations. Whole Hearts	Brown, B		2018	London: Vermilion
9781622039074	It's OK That You're Not OK: Meeting Grief and Loss in a Culture That Doesn't Understand	Devine, M		2017	Sounds True
9781938314544	The Complete Enneagram: 27 Paths to Greater Self-Knowledge	Chestnut, B.		2013	She Writes Press
9781479896738	Just Medicine: A Cure for Racial Inequality in American Health Care	Matthew, D. B.		2018	New York University Press.
9781615373383	Social (In)justice and Mental Health	Shim, R. S., and Vinson, S.Y		2020	American Psychiatric Association Publishing
9780367676186	A Scientific Framework for Compassion and Social Justice	Sadavoy, J. A. and Zube, M. L.		2021	New York: Routledge Press.

Professional Appearance

Cleveland Clinic maintains rigorous standards of professional conduct. This extends to the dress and grooming of all personnel (employees, residents, interns, associate staff and volunteers) representing the Center for Spiritual Care.

Guidelines:

1. All personnel will be dressed and groomed professionally.
2. Informal sportswear is not appropriate.
3. CCF Badges must be worn.
4. Open sandals and toed shoes are not appropriate.
5. Perfume, Cologne, and other scents should be avoided.
6. Religious symbols should not be visible on clothing as we serve all people.

Appearance is the first thing observed by others and research indicates that it is best to present yourself as a person who possesses credibility, efficiency, and professionalism as a spiritual care provider to all patients, families, and caregivers.

COURSE DESCRIPTION

COURSE DESCRIPTIONS

Cardiac Ultrasound

AE101 - Adult Echocardiography I

Clock Hours: 135

This course provides detailed instruction of heart anatomy and physiology. It will discuss medical terminology, cardiac anatomy, ECG basics, introduction to the sonographic assessment and technical interpretation of heart disease, and the cardiac cycle. Additionally, this course discusses evaluation of right and left ventricular function, valve disease, prosthetic valve, diastology and hemodynamics.

Pre-requisite: Admission to the program

AE101L - Adult Echocardiography Scan Lab I

Clock Hours: 182

This course compliments the didactic instruction of AE 101. Laboratory demonstration and student practice in scanning techniques and protocol related to the various heart structures are included. This course provides an orientation to clinical aspects of medical imaging by scanning each other and other volunteers. Under supervision, the students will become familiar with the imaging equipment controls, transducer positions relative to anatomy, and scanning techniques.

Course Requirements: Students must earn the minimum grade of 75% to progress to the next semester and continue the program.

Pre-requisite: Admission to the program

Co-requisite: AE 101

AE103 - Clinical Externship I

Clock Hours: 198

This practicum enables the student to learn and obtain images in a clinical setting. It provides an orientation to clinical aspects of medical imaging in a hospital environment for students without significant previous experience in clinical health care. It includes an introduction with emphasis on the basic orientation to a hospital cardiology department, its function and its basic patient care techniques. Students will assist with routine echo lab procedures in all cardiac sonography studies and apply the skills learned in scanning lab.

Course Requirements: Students must earn the minimum grade of 75% to progress to the next semester and continue the program.

Pre-requisite: Admission to the program

Co-requisites: AE 101, AE 101L

AE201 - Adult Echocardiography II

Clock Hours: 48

This course is an extension of AE 101 Adult Echocardiography I, covering in depth pathophysiology of heart disease and the role of ultrasound diagnosis. Introduction of global longitudinal strain, three-dimensional imaging, transesophageal echo, structural heart disease and advanced valve disease.

Course Requirements: Students must earn the minimum grade of 75% to progress to the next semester and continue the program.

Pre-requisite: AE 101

Co-requisite: AE 201L

AE201L - Adult Echocardiography Scan Lab II

Clock Hours: 112

This course compliments the didactic instruction of AE 201. Laboratory demonstration and student practice in scanning techniques and protocol related to the various heart structures are included. Under supervision, the students will be proficient with the imaging equipment controls, transducer positions relative to anatomy, and scanning techniques. This course will also involve echocardiography image review and preliminary reporting with ongoing question and answers. It is structured to increase in complexity and difficulty and the student progresses.

Course Requirements: Students must earn the minimum grade of 75% to progress to the next semester and continue the program.

Pre-requisite: AE 101L

Co-requisite: AE 201

AE102 - Ultrasound Physics and Instrumentation

Clock Hours: 32

Fundamental principles of ultrasound physics including sound wave generation and propagation in tissue; factors affecting acoustical impedance and reflection. Transducer design, characteristics & construction and principles of Doppler ultrasound will also be covered. Integration of these theories, principles, and their clinical applications will be emphasized.

Course Requirements: Students must earn the minimum grade of 75% to progress to the next semester and continue the program.

Pre-requisite: Admission to the program

AE203 - Clinical Externship II

Clock Hours: 450

This practicum enables the student to learn and obtain images in a clinical setting. Students will continue to assist with routine echo lab procedures in all cardiac sonography studies and apply the skills learned in scanning lab.

Course Requirements: Students must earn the minimum grade of 75% to progress to the next semester and continue the program.

Pre-requisites: AE 101, AE 101L, AE 103

Co-requisites: AE 201, AE 201L

AE301 - Adult Echocardiography III

Clock Hours: 45

This course is an extension of AE 201 Adult Echocardiography II, and will be a comprehensive review of material covered throughout the year. New topics such as embryology and congenital pathologies will be introduced, and complex pathophysiology and ultrasound findings.

Course Requirements: Students must earn the minimum grade of 75% to progress to the next semester and continue the program.

Pre-requisite: AE 201

AE303 - Clinical Externship III

Clock Hours: 549

This is the last of three consecutive clinical practicum courses in which the student is supervised in a clinical setting. Students will assist with routine echo lab procedures in all cardiac sonography studies. The final goal is to achieve a competency level of an entry-level cardiac sonographer upon completion of the clinical course sequence.

Course Requirements: Students must earn the minimum grade of 75% to progress to the next semester and continue the program.

Pre-requisite: AE 203

Co-requisite: AE 301

Cardiovascular Perfusion

PER101 - Perfusion Theory I

Clock Hours: 48

This is an introductory course starting with cardiovascular anatomy, principles of hemodilution, myocardial protection and pharmacology. Topics include the perfusion circuit and ancillary equipment as it pertains to the patient's pathology.

Co-requisites: PER 102, PER 103, PER 100L

PER102 - Perfusion Theory II

Clock Hours: 33

This course is concurrent with the topics in Perfusion Theory I. Emphasis is given to blood components and coagulation, autotransfusion, and laboratory analysis.

Co-requisites: PER 101, PER 103, PER 100L

PER103 - Perfusion Circuit

Clock Hours: 32

This course is designed to acquaint the student with the various components that make up the perfusion circuit. Emphasis is placed on the history, performance and limitations of each component in the perfusion circuit.

Co-requisites: PER 101, PER 102, PER 100L

PER100L - Clinical Instruction I

Clock Hours: 579

This is an introductory course acquainting the student with the heart-lung machine. Emphasis is placed on the student to learn how to assemble the disposables of the perfusion circuit and to be able to prepare the heart-lung machine in a timely manner.

Co-requisites: PER 101, PER 102, PER 103

PER101L - Clinical Implementation I

Clock Hours: 32

This course integrates perfusion theory and the components of the perfusion circuit. Emphasis is placed on patient strategies for successful outcomes with routine cardiac procedures.

Co-requisites: PER 105, PER 106, PER 104, PER 200L

PER104 - Perfusion Theory III

Clock Hours: 33

This course is a continuation of the topics introduced in Perfusion Theory I and II. Emphasis is given to pediatrics and unique patient pathologies and surgical techniques.

Co-requisites: PER 105, PER 106, PER 101L, PER 200L

PER105 - Research Seminar I

Clock Hours: 16

This is an introductory course acquainting the student with research methods in perfusion. The student will complete a case report and presentation.

Co-requisites: PER 106, PER 104, PER 101L, PER 200L

PER106 - Perfusion Special Topics

Clock Hours: 16

This course is a compilation of perfusion topics of special interest to complete the students' perfusion education.

Co-requisites: PER 105, PER 104, PER 101L, PER 200L

PER200L - Clinical Instruction II

Clock Hours: 586

This course is a continuation of the Clinical Instruction for Perfusion students. Emphasis is placed on the management of an open-heart surgery case from start to finish.

Co-requisites: PER 105, PER 106, PER 104, PER 101L

PER201L - Clinical Implementation II

Clock Hours: 28

This course is a continuation of Clinical Implementation I with a focus on practical application of perfusion theory and the components of the perfusion circuit. Emphasis is placed on patient strategies for successful outcomes with complex cardiac procedures.

Co-requisites: PER 108, PER 107, PER 200L

PER107 - Mechanical Circulatory Support

Clock Hours: 16

This course is designed to introduce students to the scientific concepts involved with all types of mechanical circulatory support devices, including extracorporeal membrane oxygenation (ECMO) and ventricular assist devices (VADs).

PER108 - Research Seminar II

Clock Hours: 16

This is a continuation of Research Seminar I. Students will complete case reports and select a topic for their Quality Improvement project.

Co-requisites: PER 107, PER 201L, PER 300L,

PER300L - Clinical Instruction III

Clock Hours: 669

This course is a clinical continuation for perfusion students. Perfusion students are expected to run a routine case and may now start to document their successful cases toward their graduation requirements.

Co-requisites: PER 108, PER 107, PER 300L

PER109 - Research Seminar III

Clock Hours: 16

This is the final course of the Research Seminar series where the student writes their manuscript and presents the findings of their research.

Co-requisites: PER 400L

PER400L - Clinical Instruction IV

Clock Hours: 774

This course is a clinical continuation for perfusion students. Students are expected to manage all case types and finish their case requirements for graduation.

Co-requisites: PER 109

Clinical Pastoral Education Internship

CP100F – CPE Fall Extended Unit

Clock Hours: 400

This internship provides weekly training that consists of clinical time with patients, verbatim seminars, didactic sessions, interpersonal relations group (IPR), and individual supervisory consultation. Participants receive an evaluation and certificate at the completion of each unit.

CPE100S – CPE Spring Extended Unit

Clock Hours: 400

This internship provides weekly training that consists of clinical time with patients, verbatim seminars, didactic sessions, interpersonal relations group (IPR), and individual supervisory consultation. Participants receive an evaluation and certificate at the completion of each unit.

CPE100I – CPE Summer Intensive Unit

Clock Hours: 400

This internship provides weekly training that consists of clinical time with patients, verbatim seminars, didactic sessions, interpersonal relations group (IPR), and individual supervisory consultation. Participants receive an evaluation and certificate at the completion of each unit.

Computed Tomography (CT)

CT104 - Introduction to Computed Tomography Online

Clock Hours: 24

This course is delivered online and provides the student with information necessary to enter into the computed tomography clinical setting. Topics to include: Basic principles; screening procedures; patient monitoring; dose; safety precautions; contrast agents used; contraindications; equipment operated; professional roles and behavior; processing of images; routine examinations and protocols utilized; image artifacts; and compensation. Students will receive an introduction to the physics associated with computed tomography.

Pre-requisite: Admission to the program

CT103 – Computed Tomography Physics*

Clock Hours: 48

This course is delivered in a traditional classroom style or online and provides the student with a comprehensive study of the physics associated with computed tomography. Topics will include: Terminology associated with CT; history and generations of CT, EBCT, spiral scanning and multi-row scanning; CT equipment; image processing; filters and algorithms; image quality; image noise; advanced

CT imaging options; artifacts; contrast administration; patient safety; quality assurance; radiation risk factors; and dose.

CT200 – Computed Tomography Clinical Experience

Clock Hours: 300-500

Computed tomography technologists operate advanced imaging equipment to obtain computer-generated sectional images of the human body. Computed tomography technologists must be able to provide quality patient care while working closely with the radiologist in a fast-paced, high-volume area. The clinical portion of the Computed Tomography Program is designed to prepare students to be competent, efficient working technologists. Upon successful completion of the CT clinical course, students will have met the examination requirements for the ARRT and be eligible to sit for the CT post-primary certification exam.

Pre-requisite: CT 104

CT201 - Computed Tomography Physics Online*

Clock Hours: 48

This course is delivered in a traditional classroom style or online and provides the student with a comprehensive study of the physics associated with computed tomography. Topics will include: Terminology associated with CT; history and generations of CT, EBCT, spiral scanning and multi-row scanning; CT equipment; image processing; filters and algorithms; image quality; image noise; advanced CT imaging options; artifacts; contrast administration; patient safety; quality assurance; radiation risk factors; and dose.

Pre-requisite: Program Approval

*Students will take CT 103 OR CT 201. Taking CT 201 requires program approval.

Cytology

CYTO501 - Introduction to Cytopathology

Clock Hours: 9

Overview of the history and significance of cytodiagnosis and its place in the modern medical laboratory. The code of ethics for the cytologist and laboratory regulations affecting Cytopathology are presented and discussed. The basics of microscopy and the care of the microscope are included using cells from squamous epithelium.

Upon completion of the lectures, exams and exercises, the student will be able to describe the history and timeline of cytology's beginnings. The student will be able to apply the knowledge to utilize and troubleshoot a microscope.

CYTO505 - Cytopreparation

Clock Hours: 136

Laboratory hands-on experience in the accessioning, preparation and staining of all types of cytologic samples. Students learn the basics and troubleshooting of the various stains utilized in the cytology laboratory using manual and automated methods and prepare slides using state of the art equipment.

Upon completion of the lectures, exams and laboratory exercises, the student will be able to demonstrate competency of accessioning, preparation, staining and coverslipping of various cytology specimens.

CYTO510 - Gynecologic Cytopathology

Clock Hours: 145

Study of the Pap test including normal cells, inflammatory reactions, neoplasia (epithelial and non-epithelial), therapy changes and miscellaneous entities. The anatomy and histology of the female reproductive system are studied as they pertain to the cytologic sample and normal versus abnormal cytologic and histologic appearances compared. The cytologic criteria of malignancy are studied in depth.

Areas of study include the uterine cervix, endometrium, fallopian tubes, ovaries, vagina and vulva. Nomenclature used in Pap test reporting and the triage and treatment of patients with gynecologic neoplasia are also included.

Upon completion of lectures, exams and exercises, the student will be able to describe and differentiate non-neoplastic and neoplastic gynecologic entities. Students will be able to interpret and diagnose gynecologic specimens.

CYT0515 - Gynecologic Cytology Practicum

Clock Hours: 892

Instruction and supervised practice in the screening of Pap tests using conventional and liquid based slide preparations. Emphasis is placed first on accuracy and then on the building of speed in the screening process so that slides can be completed in a reasonable time with correct diagnoses. Detector and diagnostic skill building is at the core of this course.

Upon completion of daily screening exercises and meeting minimum requirement checkpoints, students will be able to demonstrate competency of gynecologic screening.

CYT0520 - Respiratory Cytopathology

Clock Hours: 26

The anatomy, histology and cytologic appearance of benign, inflammatory and neoplastic conditions of the respiratory tract are presented. Didactic and practical instruction in the appearance of various types of specimens is included. Hands-on experience is gained in the preparation and review of bronchoscopy specimens for adequacy interpretation.

Upon completion of lectures, exams, and exercises, students will be able to describe and differentiate non-neoplastic and neoplastic entities of the respiratory system. Upon completion of clinical experiences, students will demonstrate competency of rapid on-site evaluation during procedures.

CYT0530 - Effusion Fluid Cytopathology

Clock Hours: 38

The anatomy, histology and cytologic appearance of benign, inflammatory and neoplastic conditions of the body cavities are presented. In addition to the pleural and peritoneal cavities, pericardial, synovial and cerebrospinal fluids are studied. Primary and metastatic tumors and the ways to differentiate them morphologically and with the use of various stains are emphasized.

Upon completion of lectures, exams and exercises, students will be able to describe and differentiate non-neoplastic and neoplastic entities of effusion fluids. Students will be able to classify stains for various tumor types.

CYT0540 - Gastrointestinal Cytopathology

Clock Hours: 24

The anatomy, histology and cytologic appearance of benign, inflammatory and neoplastic conditions of the gastrointestinal tract are presented. Didactic and practical experience in the diagnosis of various disease processes is included. Fine needle aspiration of the liver and pancreas are included as a portion of this course.

Upon completion of lectures, exams and exercises, students will be able to describe and differentiate non-neoplastic and neoplastic entities of gastrointestinal system including pancreas and liver.

Upon completion of clinical experiences, students will demonstrate competency of rapid on-site evaluation during procedures.

CYT0550 - Genitourinary Cytopathology

Clock Hours: 25

The anatomy, histology and cytologic appearance of benign, inflammatory and neoplastic conditions of the genitourinary tract are presented. Students also learn fluorescence in-situ hybridization techniques used to follow patients for recurrent bladder cancer.

Upon completion of lectures, exams and exercises, students will be able to describe and differentiate non-neoplastic and neoplastic entities of the genitourinary system.

Upon completion of clinical experiences, students will be able to describe FISH urovysion techniques.

CYTO560 - Fine Needle Aspiration Cytopathology

Clock Hours: 36

Didactic and hands on experience in fine needle aspiration cytology as it pertains to all the body sites that are the source of cytologic material. Part of the didactic portion of this course is integrated with other courses in this curriculum in order to present the cytology of each system as a whole. Students have hands-on experience with simulated fine needle aspiration techniques and are able to view actual needle aspiration procedures as well as process specimens for immediate interpretation using several types of stains.

Upon completion of lectures, exams, and exercises, students will be able to describe and differentiate non-neoplastic and neoplastic entities of the breast, thyroid, salivary glands, lymph nodes, bone and soft tissue.

Upon completion of clinical experiences, students will demonstrate competency of rapid on-site evaluation during fine needle aspiration procedures.

CYTO570 - The Future of Cytopathology

Clock Hours: 296

Overview of the roles of companion technologies including immunohistochemistry, flow cytometry and molecular pathology and how they relate in today's cytopathology laboratory and the implications of these technologies in the future of cytology. In addition, the role of the cytologist during endoscopy ultrasound procedures for diagnosis and staging of lesions during procedures is explored with hands on experience for the student. Exposure to small biopsy techniques and processes will allow students to expand their role as a cytologist.

Upon completion of lectures and laboratory exercises, students will be able to discuss the indications and clinical significance of companion technologies. Students will be able to demonstrate competency of small biopsy grossing.

CYTO580 - Non-Gyn Cytology Practicum

Clock Hours: 388

Instruction and supervised practice in the screening of non-gynecologic specimens including fine needle aspirations. Actual cases that are in the working cytology laboratory are made available for prescreening by the students and are reviewed with faculty. Practice sets and unknown boxes provide individual study. Emphasis is placed on accuracy followed by speed.

Upon completion of daily screening exercises, students will be able to demonstrate competency of non-gynecologic screening.

CYTO600 - Laboratory Operations

Clock Hours: 46

Overview of laboratory management and cytology laboratory operation in particular. Included are a review of regulations that affect the laboratory and those individuals working there as well as the process of laboratory inspection with special emphasis on inspection by the College of American Pathologists (CAP). In addition, participation in a group project assigned by the program that demonstrates the students understanding of laboratory design and operations is required to complete this course.

Upon completion of lectures and exercises, students will be to discuss and interpret regulations and laboratory operations to support a high-quality cytology laboratory.

CYTO601 - Independent Study

Clock Hours: 131

Journal club will be once a month based on the topic that is discussed in lectures. Each student will select an article, post it to the learning management system and will ask a question about another student's article and answer a question on their own article. Independent review lessons will be distributed weekly, based on the topic covered in lecture. Each lesson will be completed individually and reviewed weekly by the Program Director. Problem based learning topics are discussed throughout and participation during the meetings but also group work during the research to determine appropriate information to support the topic discussed. Case presentation, in 3 formats, written template, poster and oral, of an interesting cytology case from the lab or a case provided to the school. The written presentation will involve research and topic review in journals and texts. The oral presentation will be presented formally to the faculty and the cytology laboratory. Written research of a cytologic topic of choice involving additional study of literature or original research on a project in the lab.

Upon completion of the exercises and research, students will be able to apply and integrate their knowledge to create multiple projects that will demonstrate research techniques and presenting skills.

Diagnostic Medical Sonography (Beachwood)

DMS101 - Introduction to Sonography & Patient Care

Clock Hours: 32

This course introduces the student to the world of diagnostic medical sonography and patient care. Topics will include the history and development of ultrasound, professional ethics specific to ultrasound, legal considerations, industry standards and OSHA guidelines, HIPPA, medical records, methods of infection control, proper scanning techniques, and ergonomics including sonographer best practices to reduce injury. In addition, it will cover patient assessment including age-related care and cultural competency, proper transport and transfer of patients with and without support equipment, taking vital signs, patient comfort and modesty, professional roles both in and out of the sonography department, and how to appropriately communicate with patients and department staff. There will be discussion of proper sterile techniques and procedures, personal protective equipment (PPE), and reporting and documenting incidents and/or adverse medication reactions, as well as discussion on hospital and departmental organization, and hospital and program affiliation.

Co-requisites: DMS 101, DMS 111, DMSL 111, DPHY 100

Pre-requisite: Admission to Diagnostic Medical Sonography Program (Beachwood)

DMS111 - Abdominal Imaging I

Clock Hours: 72

This course will introduce the internal organs to the student. Topics such as anatomy, physiology, embryology, pathology, pharmacology, pathophysiology, and anatomical variants of the lymphatic system, liver, gallbladder, pancreas, adrenal glands, kidneys, urinary bladder, spleen, aorta, inferior vena cava, thyroid, and neck are covered. Introduction to sonographic terminology, cross-sectional imaging, and the importance of sonographic image acquisition of normal and abnormal findings in conjunction with correlating between other modalities to confirm findings will also be discussed.

*There is a corresponding sonography scan lab with this course.

Co-requisites: DMS 101, DPHY 100

Pre-requisite: Admission to Diagnostic Medical Sonography Program (Beachwood)

DMSL111 - Introduction to Sonography Scanning Lab I

Clock Hours: 64

Selected exercises designed to reinforce concepts covered in DMS 111.

This course will introduce the internal organs to the student. Topics such as anatomy, physiology, embryology, pathology, pharmacology, pathophysiology, and anatomical variants of the lymphatic system, liver, gallbladder, pancreas, adrenal glands, kidneys, urinary bladder, spleen, aorta, inferior vena cava, thyroid, and neck are covered. Introduction to sonographic terminology, cross-sectional imaging, and the importance of sonographic image acquisition of normal and abnormal findings in conjunction with correlating between other modalities to confirm findings will also be discussed.

Co-requisites: DMS 101, DPHY 100

Pre-requisite: Admission to Diagnostic Medical Sonography Program (Beachwood)

DPHY100 - Ultrasound Physics & Instrumentation

Clock Hours: 64

This course is designed to present the physical and mathematical principles of diagnostic medical sonography to the students. Topics will include understanding the physical attributes of sound waves and how images are generated, attenuation, transducer construction and function, ultrasound instrumentation, multi-hertz frequency capabilities, dynamic range, signal processing, bioeffects, display modes, resolution, artifacts, hemodynamics, harmonics and contrast agents, emerging technology, research design, statistics, quality assurance, and Doppler principles.

Co-requisites: DMS 101, DMS 111, DMSL 111

Pre-requisite: Admission to Diagnostic Medical Sonography Program (Beachwood)

DMS112 - Abdomen II

Clock Hours: 64

This course details the anatomy, physiology, embryology, pathophysiology, pathology, pharmacology, and anatomical variants of the male reproductive system, adrenal glands, peritoneal/retroperitoneal, pleural spaces, breast, musculoskeletal, sonographic procedures, and neonatal sonography to include the hips, spine, and head. Discussion of the sonographer's role in procedures, including documentation and sterile setup, contrast imaging, elastography (ARFI), shear wave imaging, and the importance of correlation between modalities will be included.

*There is a corresponding sonography scanning lab with this course.

Co-requisites: DMS 102, DMSL 102, DCL 102

Pre-requisite: DMS 111/DMSL 111

DMSL112 - Sonography Scanning Lab II

Clock Hours: 48

Selected exercises designed to reinforce concepts covered in DMS 112.

This course details the anatomy, physiology, embryology, pathophysiology, pathology, pharmacology, and anatomical variants of the male reproductive system, adrenal glands, peritoneal/retroperitoneal, pleural spaces, breast, musculoskeletal, sonographic procedures, and neonatal sonography to include the hips, spine, and head. Discussion of the sonographer's role in procedures, including documentation and sterile setup, contrast imaging, elastography (ARFI), shear wave imaging, and the importance of correlation between modalities will be included.

*There is a corresponding sonography scanning lab with this course.

Co-requisites: DMS 102, DMSL 102, DCL 102

Pre-requisite: DMS 111/DMSL 111

DMS102 - Gynecology & First Trimester Pregnancy

Clock Hours: 72

The course details the anatomy, physiology, embryology, pathophysiology, pathology, pharmacology, and anatomical variants during all stages of the female reproductive system, including gynecological disease processes, infertility monitoring, and the developing fetus throughout the first trimester of pregnancy. Medical and surgical interventions, procedures, and the importance of comparative imaging with other modalities will all so be considered. This course will explain the technique of transabdominal versus transvaginal imaging and discuss the ethical standards of practice of when to perform an internal ultrasound.

*There is a corresponding scanning lab with this course.

Co-requisites: DMS 112, DMSL 112, DCL 102

Pre-requisite: Admission to Diagnostic Medical Sonography Program (Beachwood) & DMSL 111

DMSL102 - Sonography Scanning Lab III

Clock Hours: 72

Selected exercises designed to reinforce concepts covered in DMS 102.

The course details the anatomy, physiology, embryology, pathophysiology, pathology, pharmacology, and anatomical variants during all stages of the female reproductive system, including gynecological disease processes, infertility monitoring, and the developing fetus throughout the first trimester of pregnancy. Medical and surgical interventions, procedures, and the importance of comparative imaging with other modalities will all so be considered. This course will explain the technique of transabdominal versus transvaginal imaging and discuss the ethical standards of practice of when to perform an internal ultrasound.

Co-requisites: DMS 112, DMSL 112, DCL 102

Pre-requisite: Admission to Diagnostic Medical Sonography Program (Beachwood) & DMSL 111

DCL102 - Clinical Experience I

Clock Hours: 304

Direct, supervised sessions in the clinical setting that will emphasize development of the practical application of direct and indirect patient care, department workflow and sonographic scanning, as taught in the scanning lab. These applications will have emphasis on knobology, equipment orientation, proper scanning positions and planes, and general patient care. Introductory scanning on patients will include the liver, gallbladder, pancreas, kidneys, urinary bladder, adrenal glands, spleen, aorta, inferior vena cava, thyroid, and neck. Students will need to successfully complete all the assigned clinical competency examinations while supervised by a registered diagnostic medical sonographer at the assigned clinical site.

Co-requisites: DMS 112, DMSL 112. DMS 102, DMSL 102

Pre-requisite: Successful completion of Diagnostic Medical Sonography Program (Beachwood) Term 1

ETH101 - Healthcare Ethics and Law

Clock Hours: 24

This course is designed to provide the student with a fundamental background in healthcare ethics and law. The historical and philosophical basis of ethics as well as the elements of ethical behavior are also discussed. The student will examine a variety of ethical issues and dilemmas that may occur in clinical practice. An introduction to legal terminology, concepts and principles of law will also be presented. Topics include misconduct, malpractice, unintentional and intentional torts, HIPPA standards and

compliance, legal and professional standards, the ASRT/ARDMS scope of practice. The importance of proper documentation and informed consent will be emphasized.

Co-requisites: DMS 103, DMSL 103, DMS 200, DCL 103

Pre-requisite: Successful completion of Diagnostic Medical Sonography Program (Beachwood) Term 2

DMS103 - Second & Third Trimester

Clock Hours: 54

This course details the anatomy, physiology, embryology, pathophysiology, pharmacology, and anatomical variants of normal and common pathologic conditions of the second and third trimesters of pregnancy. Topics will include fetal development and biometry, fetal weight and age assessment, fetal abnormalities, multiple gestations, and maternal disease processes and how they can affect pregnancy. Correlation with ultrasound guided perinatal procedures, genetic testing, and medical and surgical interventions are also included.

*There is a corresponding sonography scan lab with this course.

Co-requisites: ETH 101, DMS 200, DCL 103

Pre-requisite: DMS 102/DMSL 102

DMSL103 - Sonography Scanning Lab IV

Clock Hours: 36

Selected exercises designed to reinforce concepts covered in DMS 103.

This course details the anatomy, physiology, embryology, pathophysiology, pharmacology, and anatomical variants of normal and common pathologic conditions of the second and third trimesters of pregnancy. Topics will include fetal development and biometry, fetal weight and age assessment, fetal abnormalities, multiple gestations, and maternal disease processes and how they can affect pregnancy. Correlation with ultrasound guided perinatal procedures, genetic testing, and medical and surgical interventions are also included.

Co-requisites: ETH 101, DMS 200, DCL 103

Pre-requisite: DMS 102/DMSL 102

DCL103 - Clinical Experience II

Clock Hours: 288

Direct, supervised sessions of sonographic scanning with emphasis on the development of the practical application and scanning techniques of obtaining sonographic images of the organs of the male and female reproductive systems, gastrointestinal tract, peritoneal/retroperitoneal and pleural spaces with continued proficiency on the liver, gallbladder, pancreas, kidneys, urinary bladder, adrenal glands, spleen, aorta, inferior vena cava, thyroid, and neck. Students will need to successfully complete all the assigned clinical competency examinations while supervised by a registered diagnostic medical sonographer.

Co-requisites: DMS 103, DMSL 103, ETH 101, DMS 200

Pre-requisite: DCL 101

DMS200 - Registry Review: Sonographic Principles & Instrumentation

Clock Hours: 24

This course will prepare the students for the Sonographic Principles & Instrumentation (SPI) examination. The course material will follow the current ARDMS Exam Content Outline. The course will review the physical and mathematical principles of diagnostic medical sonography. Knowledge of the physical attributes of sound waves and how images are generated, attenuation, transducer construction and function, ultrasound instrumentation, multi-hertz frequency capabilities, dynamic range, signal processing,

bioeffects, display modes, resolution, artifacts, hemodynamics, harmonics and contrast agents, statistics, emerging technology, quality assurance, and Doppler principles will be tested.

Co-requisites: DMS 103, DMSL 103, ETH 101,

Pre-requisite: DPHY 100

DMS223 - Introduction to Vascular

Clock Hours: 16

This eight-week course involves a specialized study of the anatomy, physiology, hemodynamics, pharmacology, clinical signs and symptoms, and pathologies of the cerebrovascular, peripheral arterial, and deep venous systems. Correlation with other modalities, medical and surgical procedures, scanning techniques, direct/indirect testing methods, gold-standards regarding testing and statistics will also be included.

*There is a corresponding sonography scanning lab with this course.

Pre-requisite: Successful completion of Diagnostic Medical Sonography Program (Beachwood) Term 3

DMSL 223 - Sonography Scanning Lab V

Clock Hours: 24

Selected exercises designed to reinforce concepts covered in DMS 223.

This eight-week course involves a specialized study of the anatomy, physiology, hemodynamics, pharmacology, clinical signs and symptoms, and pathologies of the cerebrovascular, peripheral arterial, and deep venous systems. Correlation with other modalities, medical and surgical procedures, scanning techniques, direct/indirect testing methods, gold-standards regarding testing and statistics will also be included.

Pre-requisite: Successful completion of Diagnostic Medical Sonography Program (Beachwood) Term 3

DCL201 - Clinical Experience III

Clock Hours: 512

Indirect, supervised clinical time that continues to emphasize the development of critical thinking skills and exam knowledge on a more independent level. Development of imaging skills in obstetrics and gynecology, male reproductive system, and continued proficiency in sonographic scanning techniques of the aorta, inferior vena cava, pleural space, gastrointestinal tract, thyroid, and the organs of the abdomen to include the liver, gallbladder, bile ducts, pancreas, spleen, and the urinary system as taught in the scanning lab. Students need to complete all the assigned clinical competency examinations while supervised by a registered diagnostic medical sonographer.

Pre-requisite: DCL 102

Clinicals: 16 weeks, 4 days/week (8 hours daily)

DMS226 - Registry Review-Abdomen

Clock Hours: 16

This eight-week course will prepare the students for their final clinical rotation and the abdominal registry examination. The course material will follow the current ARDMS Exam Content Outline. The review will include the abdomen with emphasis on sonographic abnormalities of the liver, gallbladder, pancreas, kidney, spleen, and aorta. The course will also review sonographic abnormalities of the abdominal wall, breast, pleural space, structures of the neck, peritoneum, retroperitoneum, prostate, scrotum, and superficial structures. Image identification, mock exams, and procedural scenarios will be covered to evaluate knowledge from previous courses.

Pre-requisite: DMS 111/DMSL 111

DCL202 - Clinical Experience IV

Clock Hours: 512

Indirect, supervised clinical time that continues to emphasize the development of critical thinking skills and exam knowledge on a more independent level. Continued proficiency in sonographic scanning techniques of the liver, gallbladder, bile ducts, pancreas, spleen, urinary tract, aorta, inferior vena cava, non-cardiac chest, gastrointestinal tract, male reproductive, thyroid, gynecology, and obstetrics will be evaluated and tested. Students need to complete all the assigned clinical competency examinations while supervised by a registered diagnostic medical sonographer.

Pre-requisite: DCL 201

Clinicals: 16 weeks, 4 days/week (8 hours daily)

DMS230 - Capstone

Clock Hours: 16

This eight-week course will be utilized for the student to demonstrate the skills and knowledge mastered during the Diagnostic Medical Sonography Program (Beachwood) both in lecture and at clinicals. Preparation for the employment interview process and presentation of qualifications through a resume and cover letter will be included. Importance of credentialing, professional involvement, career advancement, and continuing education will be stressed. Students will present one interesting case that they performed in the clinical setting to a community of their peers in a formal presentation.

Pre-requisite: Successful completion of Diagnostic Medical Sonography Program (Beachwood) Term 4

DMS227 - Registry Review – Obstetrics & Gynecology

Clock Hours: 16

This eight-week course will help challenge the students for their final clinical rotation and prepare them for the obstetrics/gynecology specialty registry examination. The course material will follow the current ARDMS Exam Content Outline. The course will review the female reproductive system with emphasis on the sonographic appearance of normal and abnormal appearances of the uterus and ovaries and will include obstetrics with the emphasis on fetal biometric measurements and developmental abnormalities, genetic testing, and maternal abnormalities.

Pre-requisite: DMS 102/DMSL 102

Diagnostic Medical Sonography (Mercy)

DMS101 - Introduction to Ultrasound

Clock Hours: 22

This class is an introduction to the theory and practice of ultrasound in the current health care system. It details the basic concepts of the physics of ultrasound and anatomical, directional and descriptive terms, with emphasis on ultrasound terminology. The students will also learn the standards of scanning and correct ergonomics. The students will be introduced to professional sonography societies and encouraged to join. The students will be given lectures that cover medical law, code of ethics, professionalism, and patient care specific to sonography. The student will also learn about the importance of cultural competency.

DMS102 - Abdomen

Clock Hours: 58

This class details the anatomy, physiology and pathology of the following organs: liver, gallbladder/biliary system, pancreas, genitourinary system, spleen, adrenals, and retroperitoneum. Detailed instruction is given in the basic methods of routine abdominal examinations. The students will learn the sonographic appearance of the abdominal organs in both normal and pathological situations. Basic Doppler flow characteristics are also discussed with more emphasis on Doppler in the 4th quarter.

DMS103 - Sectional Anatomy**Clock Hours: 57.5**

This course will teach students to recognize anatomy in sectional planes, including transverse, sagittal and coronal planes. The students will be instructed in sectional anatomy in the following areas: head, neck, thorax, abdomen, and pelvis. Pictorial slabs as well as drawings, CT, MRI, PET and ultrasound images will be used to enhance the students' learning experience.

DMS105 - Gynecology/OB 1**Clock Hours: 28.5**

This class details anatomy, physiology and pathology of the female reproductive organs, pelvic musculature and pelvic ligaments. Detailed instruction is given in basic methods of routine pelvic examinations including transvaginal exams. The student will be able to identify the sonographic appearance and Doppler characteristics of the pelvic organs in both normal and abnormal conditions. This course also details the anatomy, embryology, physiology and pathology of the first trimester pregnancy. The student will receive detailed instruction in basic methods of first trimester obstetric examinations, including transvaginal exams. The students will be able to recognize the ultrasound appearance of first trimester pregnancy and female pelvis in both normal and abnormal situations.

DMS106 - Obstetric 2/3**Clock Hours: 72.5**

In this class the students will be instructed in detail the anatomy, physiology, pathology and anomalies of the 2nd and 3rd trimester pregnancy. The students will be instructed in the appropriate methods for obtaining fetal measurements and detailed fetal anatomy, as well as in assessing maternal structures, the placenta and Doppler evaluation during pregnancy. The students will be taught to recognize both normal and abnormal conditions associated with pregnancy.

DMS108 - Superficial Structures (ABD)**Clock Hours: 37**

This class details the anatomy, physiology and pathology of the thyroid gland, scrotum, breast and prostate gland. The student will be able to identify the sonographic appearance and Doppler characteristics of these structures in normal and pathological conditions. The student will receive detailed instruction in basic methods of small parts examinations.

DMS109 - Ultrasound Physics**Clock Hours: 75**

The goal of this class is to teach the students the principles and instrumentation of ultrasound. The students will learn to recognize and correct artifacts. The students will be instructed in the physics of ultrasound, instrumentation, Doppler, hemodynamics, safety issues, biological effects, emerging technologies and quality assurance and performance.

DMS111 - Pediatrics and Miscellaneous**Clock Hours: 50.5**

This class will help the students to recognize the sonographic appearance of normal and pathological conditions of the abdomen, pelvis, hips, spine, neonatal brain, musculoskeletal structures and GI tract. This class will discuss normal anatomy and pathology of the following organs/areas: Knee (popliteal space), GI tract, appendix, abdominal wall, non-cardiac chest, MSK system and miscellaneous lesions. The student will learn to recognize the normal and abnormal sonographic appearance of these structures/areas and they will be instructed in the basic scanning methods of them as well. In addition, the student will continue to build on the knowledge of vessel, anatomy, physiology and pathology discussed in Abdomen. The students will receive instruction on the theory and use of Doppler, color Doppler and power Doppler during an abdominal Doppler evaluation. The following areas will be covered: aorta (and branches), IVC, the portal venous system, TIPS, organ transplants, renals and renal arteries and veins. The students will be able to recognize normal and abnormal sonographic appearances of abdominal vasculature. An introduction to vascular, including peripheral arteries, veins and Doppler evaluation will be included in this course.

DMS112 - Registry Review**Clock Hours: 26**

This class serves as a review in preparation for the ARDMS examinations. Students will be given review exercises in the areas of Abdomen, OB/Gyn and Physics. The student will take "mock registries" with at least a 75% average in order to pass the class.

DMS104 - Clinical I**Clock Hours: 310.5**

The first quarter of clinical training the student will concentrate mostly on abdominal scanning and equipment competencies. The majority of competencies focus on abdominal scanning including liver, gallbladder, aorta, pancreas, renals and spleen. Students will be given detailed instruction in scan techniques and clinical skills in the above areas. The students are also given detailed instruction in the operation of the sonographic equipment and correct ergonomics. All competencies must be completed successfully to pass the clinical portion of the quarter. Basic Doppler evaluation will be taught.

DMS107 - Clinical II**Clock Hours: 355**

The second quarter of clinical training concentrates on Abdomen and OB/Gyn scanning. Students will be given detailed instruction in scan techniques and clinical skills in the above areas. Competencies are in the above areas including transvaginal examination and must be successfully completed to pass the clinical portion of the quarter. Doppler evaluation of these organs/areas will be included.

DMS110 - Clinical III**Clock Hours: 330**

The third quarter of clinical training concentrates on Abdomen, OB/Gyn and Superficial structure scanning. Students will be given detailed instruction in scanning techniques and clinical skills including Doppler in the above areas. All required competencies must be completed in the above areas to pass the clinical portion of this quarter.

DMS113 - Clinical IV**Clock Hours: 347.5**

The fourth quarter of clinical training includes competencies in the areas of abdomen, superficial structures, MSK and OB/Gyn (with 3D imaging). More detailed instruction will be given for Doppler evaluation of the portal and hepatic vessels, renal vessels and other abdominal vessels as encountered in the clinical area. ARFI scan technique and needle procedure guidance will also be taught. Students will focus on fine tuning their scanning skills in these areas. All competencies must be successfully completed to pass the clinical portion of this quarter.

DMS102L - Lab 1**Clock Hours: 32**

This lab is structured to ensure students have acquired the sonographic and clinical skills necessary to achieve clinical competence. The focus is on abdominal scanning including the right upper quadrant (liver, gallbladder, pancreas), aorta, renals, bladder, adrenals, and spleen. The students are also given detailed instruction in the operation of the sonographic equipment and correct ergonomics. Basic Doppler evaluation will be taught. All lab assessments must be successfully completed to pass the Lab.

DMS105L - Lab 2**Clock Hours: 24**

This lab is structured to ensure students have acquired the sonographic and clinical skills necessary to achieve clinical competence. This lab concentrates on OB/Gyn scanning techniques and associated clinical skills. Doppler evaluation of these organs/areas will be included. All lab assessments must be successfully completed to pass the Lab.

DMS108L - Lab 3**Clock Hours: 12**

This lab is structured to ensure students have acquired the sonographic and clinical skills necessary to achieve clinical competence. This lab concentrates on scanning superficial structures and includes Doppler techniques for these structures. All lab assessments must be successfully completed to pass the Lab.

DMS111L - Lab 4

Clock Hours: 10

This lab is structured to ensure students have acquired the sonographic and clinical skills necessary to achieve clinical competence. This lab will concentrate on the areas of abdomen Doppler, MSK and 3D imaging. Detailed instruction will be given for Doppler evaluation of the portal and hepatic vessels, renal vessels and mesenteric vessels. Acoustic Radiation Force Imaging (ARFI) scan technique, non-cardiac chest and needle procedure guidance will also be taught. Students will focus on fine tuning their scanning skills. All lab assessments must be successfully completed to pass the Lab.

Dietetic Internship

NUTR101 - Dietetic Technician

Clock Hours: 24

Interns gain comfort and familiarity with navigating the hospital, interviewing patients, providing diet education and using the electronic medical record.

NUTR102 - Core Clinicals - Inpatient 1 & 2

Clock Hours: 240

Inpatient which may include: cardiology, hepatology, internal medicine, neurology, colorectal, bariatrics and oncology.

NUTR103 - Core Clinicals - Outpatient

Clock Hours: 120

Outpatient: medical nutrition therapy for various acute and chronic conditions, focusing on collaborative goal setting and behavior change techniques.

NUTR104 - Advanced Clinicals

Clock Hours: 360

Three weeks each developing advanced clinical nutrition skills among specialized populations in settings of: intensive care, parenteral nutrition, pediatrics.

NUTR201 - Electives

Clock Hours: 240

Two weeks each to explore nutrition practice among specialized populations in settings of: community/public health; sales/marketing and advanced practice.

NUTR202 - Staff Relief

Clock Hours: 80

Interns are able to return to one of their favorite experiences from the clinical core rotations and will be responsible for seeing all or most of their preceptor's assigned patients, functioning independently in the RD role.

NUTR203 - Clinical Management

Clock Hours: 40

Interns work with a clinical nutrition manager for one week to develop a greater understanding of management styles, employee recruitment, retention, and performance evaluation, including coaching and leadership initiatives to encourage better patient care and employee satisfaction.

NUTR204 - Research / QI**Clock Hours: 80**

Interns are matched with a dietitian who is actively working on a research or quality improvement project. Rotation responsibilities include but are not limited to: IRB completion and submission, assisting with data collection and entry, reviewing current research literature, and working with the team to develop a manuscript or abstract for professional submission.

NUTR400 - Patient Foodservice Management**Clock Hours: 160**

Interns will work on either Main Campus or at a Cleveland Clinic Regional Hospital to learn about the patient and retail foodservice structure including: meal preparation and supplemental distribution, menu development, safety and regulation, and therapeutic diets. A foodservice manager will work with the intern to provide directed training toward good management practices in the supervision, training and coaching of foodservice employees and preparing to address issues related to customer and patient satisfaction.

Medical Laboratory Science**MLS5101 - Bacteriology I****Clock Hours: 87**

Lectures introduce specimen collection, transport, processing, and storage as well as quality assurance and quality control. Additional lectures will cover medically relevant aerobic gram-positive bacteria. Laboratory work emphasizes isolation, identification, and antibiotic susceptibility testing of aerobic gram-positive bacteria.

Upon completion of the lectures, exams and laboratory exercises, the student will be able to explain the criteria for specimen collection, transport, processing, and storage of most specimen types as well as quality assurance and quality control as it applies to the microbiology laboratory. The student will also be able to isolate, identify, and perform susceptibility testing on clinically significant aerobic gram-positive bacteria.

MLS5102 - Bacteriology II**Clock Hours: 94**

Lectures present the medically relevant aerobic gram-negative bacteria, anaerobic bacteria, and viruses. Laboratory work emphasizes the strategies for isolation and identification of clinically significant aerobic gram-negative bacteria and anaerobes.

Upon completion of the lectures, exams and laboratory exercises, the student will be able to isolate, identify, and perform susceptibility testing on clinically significant aerobic gram-negative bacteria and anaerobes. The student will also be able to summarize clinically significant viruses and various viral testing methods.

Pre-requisite: MLS 5101

MLS5103 - Mycology and Mycobacteriology**Clock Hours: 46**

Lectures introduce clinically significant yeasts, molds, and other fungi. Additional lectures will cover the medically important mycobacteria. Special topics will focus on infection prevention. Laboratory work will emphasize the isolation and identification of fungi and mycobacteria as well as susceptibility testing of mycobacteria.

Upon completion of the lectures, exams and laboratory exercises, the student will be able to describe the process of cultivation and identification of mycobacteria, yeasts, molds, and other fungi. Additionally, the student will be able to explain the impact of the microbiology laboratory on infection control.

MLS5104 - Parasitology

Clock Hours: 54

Lectures cover life cycles, diagnostic morphology, and pathology of human parasites. The course also emphasizes the detection and microscopic identification of diagnostic forms of parasites and detection of blood in fecal specimens.

Upon completion of the lectures, exams and laboratory exercises, the student will summarize clinically significant parasites and be able to detect and identify cysts, trophozoites, eggs, and larvae in human specimens.

ML5201 - Hematology I

Clock Hours: 88

Lectures and reading assignments cover the basic methods of manual and automated hematology testing as well as the production, function, and morphology of hematopoietic cells. The various causes and presentations of anemias are also covered. The course also covers manual and automated enumeration and identification of the cellular components of blood and performance of diagnostic test procedures. Laboratory work will give the student hands-on experience with instrumentation and manual methods to assist with the understanding of troubleshooting, quality control, and result interpretation.

Upon completion of the lectures, exams, and laboratory exercises, the student will describe the function of hematology analyzers, operate analyzers, perform diagnostic laboratory determinations, analyze the results, and diagnose anemias of various disease origins.

MLS5202 - Hematology II

Clock Hours: 88

Lectures cover the production and function of hemoglobins, the identification of diseases associated with abnormal hemoglobins, and the principles of laboratory tests employed in their diagnosis. The course also covers morphology of white blood cells, discussion of the diagnostic features of hematologic disorders and principles of laboratory tests employed in their diagnosis. Additionally, specimen collection, manual and automated enumeration and identification of white blood cells, and performance of diagnostic test procedures are also discussed and/or practiced. Laboratory work will give the student hands-on experience with instrumentation and manual methods to assist with the understanding of troubleshooting, quality control and result interpretation.

Upon completion of the lectures, exams and laboratory exercises, the student will describe the production and function of hemoglobins, white blood cells, and the disorders which affect them. They will also exhibit the ability to perform diagnostic laboratory determinations and interpret and correlate the results and apply the knowledge to examine and correlate test results to disease conditions.

Pre-requisite: MLS5201

MLS5203 - Hemostasis and Thrombosis

Clock Hours: 44

Lectures cover the process of hemostasis, hemorrhagic and thrombotic disorders and the principles and performance of laboratory procedures used in the diagnosing and monitoring disorders. Laboratory work will give the student hands-on experience with instrumentation and manual methods to assist with the understanding of troubleshooting, quality control and result interpretation.

Upon completion of the lectures, exams and laboratory exercises, the student will evaluate the hemostasis of the coagulation system including the coagulation, fibrinolysis and the production and function of platelets and disorders that affect them, exhibit the ability to perform diagnostic laboratory

determinations and correlate the results and apply the knowledge to examine and correlate test results to disease conditions.

MLS5204 - Urinalysis and Body Fluids Analysis

Clock Hours: 47

Lectures cover the physiology and clinical importance of examining urine and body fluids. The course also covers the anatomy and physiology of the kidney in health and disease and the chemical and microscopic examination of urine and body fluids. Laboratory work will give the student hands-on experience with instrumentation and manual methods to assist with the understanding of troubleshooting, quality control and result interpretation.

Upon completion of the lectures, exams and laboratory exercises, the student will describe the characteristics and components of body fluids and urine, illustrate and explain kidney anatomy, kidney function and dysfunction, describe specimen collection, processing, and handling and will apply the knowledge of the principles, interpretation, QC, and clinical significance to physiochemical tests performed on urine. Additionally, the student will be able to discuss and differentiate the properties and physiologic makeup of body fluids.

MLS5301 - Immunopathology I

Clock Hours: 80

Lectures cover the characteristics of antigens, antibodies, their reactions and the principles of laboratory tests involving antigen-antibody reactions. Laboratory work will give the student hands-on experience with instrumentation and manual methods to assist with the understanding of troubleshooting, quality control and result interpretation.

Upon completion of the lectures, exams and laboratory exercises, the student will be able to apply the knowledge of the immune system, its components, function, dysfunction and evaluation, summarize various serodiagnostic tests, including the theory and clinical importance of their results and discover the correlation between serologic, hematologic, urinalysis, chemistry and microbiologic results.

MLS5302 - Immunopathology II

Clock Hours: 74

Lectures cover the function and dysfunction of the immune mechanism and the laboratory tests used to measure its integrity. A survey of infectious diseases for which serologic testing is of diagnostic importance is also covered. Laboratory work will give the student hands-on experience with instrumentation and manual methods to assist with the understanding of troubleshooting, quality control and result interpretation.

Upon completion of the lectures, exams and laboratory exercises, the student will be able to apply the knowledge of the immune system, its components, function, dysfunction and evaluation, summarize various serodiagnostic tests, including the theory and clinical importance of their results and discover the correlation between serologic, hematologic, urinalysis, chemistry and microbiologic results.

Pre-requisite: MLS 5301

MLS5401 - Immunohematology I

Clock Hours: 87

Lectures cover the ABO and Rh blood group systems as well as other common blood group systems including their inheritance, antigen and antibody characteristics, and clinical significance, the identification, resolution, and cause of ABO type discrepancies, and serologic procedures performed prior to blood transfusion. Laboratory work will give the student hands-on experience with instrumentation and manual methods to assist with the understanding of troubleshooting, quality control, and result interpretation.

Upon completion of the lectures, exams, and laboratory exercises, the student will explain the principle of tests performed in the blood bank and their importance to the physician and the patient. They will be able

to recognize antigen and antibody characteristics of various blood group systems and explain how these might affect patient care. The student will also identify ABO type discrepancy and resolve them patient.

MLS5402 - Immunohematology II

Clock Hours: 87

Lectures cover the collection and processing of donor units, donor screening, component preparation, transfusion therapy, and adverse effects of blood transfusion. Additionally, Hemolytic Disease of the Fetus and Newborn, various types of autoimmune hemolytic anemia, the HLA blood group system, hematopoietic stem cell transplantation, and some molecular testing methods are investigated. Laboratory work will give the student hands-on experience with instrumentation and manual methods to assist with the understanding of troubleshooting, quality control, and result interpretation.

Upon completion of the lectures, exams, and laboratory exercises, the student will explain the causes and sources of error in the tests performed. They will be able to identify and describe adverse effects of blood transfusion using a variety of test methods. The student will explain the process of donor screening and component preparation and its importance in providing safe blood products for patients. The student will explain the significance of hemolytic disease of the fetus and newborn and autoimmune hemolytic anemia and perform testing to help identify them. The student will also describe the significance of hematopoietic stem cell transplantation and HLA and molecular testing.

MLS5501 - Chemistry I

Clock Hours: 118

Lectures, reading assignments and hands-on practice are used to present basic laboratory principles of medical laboratory science techniques including quality control, laboratory statistics, pipetting, glassware and function verification/preventative maintenance (FVPM). Safety including basic knowledge of various chemical and biological hazards, proper methods of handling and disposing of them, body fluid precautions and laboratory safety is also covered. The correct use of appropriate safety equipment and techniques is stressed during daily laboratory assignments.

The homeostasis of the human body with respect to acid-base balance, blood gases, water balance and electrolytes are examined as are the testing methodologies and requirements for specimen handling. The enzymatic processes of the patient and their pathological malfunctions are discussed and the testing explained. The substrates on which the enzymes act and the use of enzymes as reagents are additionally explained.

A survey of laboratory methods used to measure various classes of chemicals, their interpretation and clinical application is also covered. Laboratory work will give the student hands-on experience with instrumentation and manual methods to assist with the understanding of troubleshooting, quality control and result interpretation.

Upon completion of the lectures, exams and laboratory exercises, the student will be able to describe the biochemistry, physiology and measurement of various classes of chemicals and explain how to interpret and correlate the laboratory test results. The student will be able to apply quality control principles, reagent preparation, and to correlate the principles of laboratory calculations.

MLS5502 - Chemistry II

Clock Hours: 118

Lectures, reading assignments and hands-on practice are used to guide the student through a survey of the proteins of the human body. The non-protein nitrogens, lipids and vitamins are explained and the historical and more recent testing are described and practiced in the student lab with an aim to diagnose both chronic and acute conditions. Exogenous substances both prescribed and illicit will affect the body in numerous ways and how the body acts on the substances is defined. The specifics of the processes are examined and the testing discussed with an emphasis placed especially on the purposes both for taking therapeutic drugs and testing for various analytes. The regulation of complex systems of the body are carried out by the endocrine system. Several of the most important endocrine axes are diagramed

pathological increases and decreases in hormones or their precursors are explained and diagnosed both in case studies and in the student lab.

A survey of laboratory methods used to measure various classes of chemicals, their interpretation and clinical application is also covered. Laboratory work will give the student hands-on experience with instrumentation to assist with the understanding of troubleshooting, quality control and result interpretation.

Upon completion of the lectures, exams and laboratory exercises, the student will be able to describe the biochemistry, physiology and measurement of various classes of chemicals and explain how to interpret and correlate the laboratory test results. The student will be able to apply quality control principles, reagent preparation, and to correlate the principles of laboratory calculations.

Pre-requisite: MLS 5501

MLS5601 - Laboratory Operations I

Clock Hours: 89

Lectures and demonstration are used to present basic laboratory principles of venipuncture. The student will learn to effectively obtain blood specimens using the multi-sample evacuated tube system. Knowledge and understanding of medical terminology and jargon is a necessary part of effective communication skills. Self-instructional textbook assignments, a written exam and day-to-day exposure during lab activities enable the student to develop these skills.

Lectures and reading assignments cover the ethics and principles of clinical research, governmental regulations and their associated organizations, and basics of data analysis. Students will complete a written research project, using testing data to illustrate the methods used when validating a test in the clinical laboratory.

Upon completion of the lectures, exams, laboratory exercises and projects, the student will be able to apply the process learned to future test validation and research projects. In addition, the student will describe the most effective way for obtaining blood specimens from a patient.

MLS5602 - Laboratory Operations II

Clock Hours: 107

Lectures and reading assignments throughout the year cover the basics of management, leadership and educational principles. In order to demonstrate the practical application of these principles as they apply to laboratory management and education, the student is required to complete a capstone project.

Upon completion of the lectures, exams and projects, the student will differentiate the principles of management and define operational processes as they pertain to the laboratory.

MLS5603 - Laboratory Operations III

Clock Hours: 47

The last weeks of the program are devoted to a review of the year's work, integrating the knowledge from all coursework through case studies and successful completion of the program's comprehensive examinations.

Upon completion of the exams and other assignments, the student will successfully apply the knowledge gained during the program for the comprehensive exams and extrapolate that knowledge to the ASCP BOC exam.

MLS5701 - Molecular Diagnostics

Clock Hours: 72

Lectures and reading assignments cover principles of molecular biology and genetics, nucleic acid isolation and quality assessment, a broad range of molecular techniques common to molecular diagnostics services, cytogenetic studies and fluorescent in-situ hybridization. Laboratory exercises cover

micro-pipetting, PCR master mix preparation, high resolution melt curve genotyping analysis, karyotyping and FISH scoring.

Upon completion of lectures, exams and laboratory exercises, the student will be able to correlate genomic aberrations at different resolutions with neoplastic or hereditary diseases. In addition, the student will explain the pre-analytic, analytic and post-analytic components as well as compare and contrast the advantages and limitations of selected techniques in the cytogenomics and molecular biology field.

Medical Dosimetry

DOS101 - Medical Dosimetry Orientation

Contact Hours: 12

This course provides the student with an overview of the profession of Medical Dosimetry and dosimetrists' role in a radiation therapy department.

DOS201 - Dosimetry

Contact Hours: 36

This course provides an introduction to basic concepts in medical dosimetry, including linear accelerators, calculations, workflow, dose tolerances, and radiation measurements.

DOS111 - Computers and Computer Networking

Contact Hours: 10

This course summarizes the use of computers and networking in radiation oncology.

DOS211 - Radiation Treatment Planning

Contact Hours: 37

This course provides an introduction to advanced concepts in medical dosimetry, including anatomy, imaging, treatment planning, motion management, and radiation biology. This course includes site specific labs instructed by Cleveland Clinic Medical Dosimetry Training Program Clinical Preceptors.

DOS221 - Pathophysiology and Oncology Management

Contact Hours: 36

This course presents an in-depth study of multidisciplinary treatment of the cancer patient from the clinician's viewpoint. Students are required to master concepts specific to site-specific disease including histopathology, etiologic and epidemiology factors, detection and diagnosis, tumor stage and grade, routes of metastases, dose fractionation and prognostic factors. This course is designed to approach each cancer type by anatomic system, addressing treatment factors with increasing degrees of complexity.

DOS301 - Radiation Physics

Contact Hours: 34

This course covers the basics of ionizing and non-ionizing radiation, atomic and nuclear structure, basic nuclear and atomic physics, radioactive decay, interaction of radiation with matter, and radiation detection and dosimetry. Brachytherapy, Special Procedures, Quality Assurance, Stereotactic Radiotherapy, and Particle Therapy are discussed.

DOS501 - Board Review

Contact Hours: 18

This course is an in-depth review of all aspects of medical dosimetry to prepare students for the profession's certification examination.

DOS511 - Clinicals Phase 1

Contact Hours: 153.5

This course consists of training in medical dosimetry concepts and techniques. All activities are supervised by Cleveland Clinic Medical Dosimetry Training Program Clinical Preceptors and members of the Professional Staff of Cleveland Clinic's Radiation Oncology Department. This includes an introduction to Cleveland Clinic's radiation Treatment Planning System. Topics covered include contouring, beam placement, calculation point placement, beam weighting, energy selection, prescription dose, tissue heterogeneity, and image fusion.

DOS521 - Clinicals Phase 2

Contact Hours: 352.5

This course consists of training in medical dosimetry concepts and techniques. All activities are supervised by Cleveland Clinic Medical Dosimetry Training Program Clinical Preceptors and members of the Professional Staff of Cleveland Clinic's Radiation Oncology Department. Topics covered include complex 3D conformal treatment planning and Dose Volume Histogram evaluation.

Pre-requisite: DOS 511

DOS531 - Clinicals Phase 3

Contact Hours: 624

This course consists of training in medical dosimetry concepts and techniques. All activities are supervised by Cleveland Clinic Medical Dosimetry Training Program Clinical Preceptors and members of the Professional Staff of Cleveland Clinic's Radiation Oncology Department. Topic covered include basic inverse optimization techniques applied to step and shoot IMRT and VMAT.

Pre-requisite: DOS 521

DOS541 - Clinicals Phase 4

Contact Hours: 351

This course consists of training in medical dosimetry concepts and techniques. All activities are supervised by Cleveland Clinic Medical Dosimetry Training Program Clinical Preceptors and members of the Professional Staff of Cleveland Clinic's Radiation Oncology Department. Topics covered include advanced optimization techniques applied to complex radiation therapy treatments. SRS, SBRT and Brachytherapy are covered.

Pre-requisite: DOS 531

Paramedic Education

PAR100 - Paramedic Phase I

Clock Hours: 327

This phase provides a detailed study of EMS systems, documentation, communication, medical/legal issues, and ethics. This course will also cover patient assessment and history taking, scene safety, behavioral emergencies, respiratory anatomy/physiology and emergencies, pharmacology, and trauma.

PAR200 - Paramedic Phase II

Clock Hours: 253

This phase provides a detailed study of cardiovascular anatomy, physiology, pathophysiology, and emergencies. Also included is the assessment and management of patients requiring critical intervention, medical terminology, electrocardiographic (EKG) recognition and 12-lead EKG for field diagnosis, as well as pharmacological and electrical interventions.

Pre-requisite: PAR100

PAR300 - Paramedic Phase III**Clock Hours: 222**

This phase provides an understanding of the anatomic structures, physiology, and pathophysiologies encountered during assessment and the provision of care for obstetrical and gynecological emergencies, pediatric emergencies, and medical emergencies encompassing immunology, infectious disease including HIV/AIDS, the endocrine system, toxicology, environmental emergencies, SCUBA diving, and hematology.

Pre-requisite: PAR200

PAR400 - Paramedic Phase IV**Clock Hours: 160**

This phase serves as the mandatory field internship capstone portion of the program. During this phase, each student is required to obtain 20 team leads during their field internship capstone. All core material of the paramedic program has been taught by this phase. While students are completing their capstone, classes will cover National Registry review lectures including pharmacology, EMS operations, cardiology, ACLS/PALS refresher, respiratory & airway, medical emergencies, trauma, OB/GYN, & pediatrics. Students will also complete an International Trauma Life Support (ITLS) course to further review trauma in preparation for the NREMT. There will also be a variety of labs that focus on preparing the students' practical skill competency.

Pre-requisite: PAR300

Phlebotomy**PHB2001 - Phlebotomy****Clock Hours: 80**

Lectures present the principles of phlebotomy equipment and venipuncture techniques. Additional lectures will cover review of phlebotomy history and health care setting, medical terminology, anatomy and physiology with emphasis on circulatory system. Laboratory work emphasizes phlebotomy technique using multi-sample needle, syringe and butterfly collections while procuring a quality blood sample for patient testing.

Lectures will cover additional topics including principles of capillary and special collection techniques, point of care testing, specimen handling, non-blood specimens and arterial punctures. Laboratory work emphasizes capillary and aseptic techniques of blood collection. Principles of specimen handling, specimen processing and point of care testing are also emphasized.

Upon completion of lectures, quizzes and laboratory assessments, the student will be able to demonstrate the proper phlebotomy technique using the proper equipment. The student will also be able to apply medical terminology, anatomy/physiology knowledge when reviewing test orders for sample collection. Students will be able to demonstrate the concepts of communication in written, verbal and non-verbal forms. The student will be able to demonstrate aseptic technique of blood collection and capillary collection, proper methods of specimen handling, specimen processing, and point of care testing.

PHB2003 - Phlebotomy Clinical (Experience)**Clock Hours: 160**

Hands on phlebotomy experience provided at assigned location within Cleveland Clinic. During this clinical rotation, phlebotomy students will have the opportunity to obtain patient samples in both an inpatient and outpatient setting, while providing care to all patients. Students are also be provided clinical time in specimen processing areas at their assigned clinical location. Students will have 160 hours of clinical time along with a minimum of 100 unaided venipuncture collections. No separate grade is given for this course. The grade is added into the overall course grade for PHB 2001.

Primary Magnetic Resonance Imaging (MRI)

MR300 - Cross Sectional Anatomy

Clock Hours: 64

This course provides the student with fundamental anatomy and physiology associated with magnetic resonance imaging of the head, neck, face, spine, thorax, abdomen, pelvis, upper and lower extremities. The various structures will be demonstrated in the axial, sagittal and coronal imaging planes.

Pre-requisite: Admission to the program

MR301 - Procedures I

Clock Hours: 64

Introduces the basic principles of MR safety, covers the basic concepts of patient management, and teaches the education of patients and ancillary staff on magnet safety. Because patient and magnet-related emergencies represent a unique situation to an MRI technologist, recommended procedures and responsibilities of the technologist will be discussed. Other topics that will be introduced include contrast agents used, contraindications, processing of images, routine examinations and protocols utilized, image artifacts, and compensation.

Pre-requisite: Admission to the program

RT101 - Patient Care

Clock Hours: 64

This course provides an overview imaging to the basic concepts of patient care, infection control, and the role of a technologist as a member of the health care team. Content includes pharmacology and administration of diagnostic contrast agents and/or intravenous medications, patient assessment, and vital signs. Topics include: critical thinking, history of imaging, professional roles and behavior, professional attitudes and communications. Also included will be hospital and departmental organization, and hospital and program affiliation.

Pre-requisite: Admission to the program

MR302 - MRI Scanning Lab I

Clock Hours: 32

Computer simulation software to provide the student with practical scanning practice under the direction of program instructors.

Pre-requisite: Admission to the program

MR303 - Introductory Clinical Experience

Clock Hours: 112

Supervised sessions emphasizing development of medical imaging skills. Practical application of MRI imaging with an emphasis on safety, orientation to the equipment, proper scanning positions and planes, and general patient care. Designed to give the student an introduction to the basics of magnetic resonance imaging in the clinical setting.

Pre-requisite: Admission to the program

MR304 - Procedures II

Clock Hours: 32

Expands on the information covered during MRI 301 Procedures I and provides the student with imaging techniques related to the central nervous system CNS, neck, thorax, musculoskeletal MSK system, and

abdominopelvic regions. Covers specific clinical application, coils available and their use, considerations in scan sequences, specific choices in protocols (e.g., slice thickness, phase direction, and flow compensation), and positioning criteria. Anatomical structures and the plane that best demonstrates anatomy are discussed as well as signal characteristics of normal and abnormal structures.

Pre-requisite: MR301

MR305 - Physics I

Clock Hours: 32

Provides the student with a comprehensive overview of MRI imaging principles to include history, safety, nuclear MR signal production, tissue characteristics, pulse sequences, imaging parameters/options and image formation, image contrast, magnetism, properties of magnetism, MRI system components, MRI magnet (permanent, resistive, superconducting, hybrid), radiofrequency RF pulse systems, gradient systems, shim systems, and shielding.

Pre-requisite: Admission to the program

MR306 - Intermediate Clinical Experience I

Clock Hours: 448

Supervised sessions emphasizing development of medical imaging skills. Practical application of MRI imaging with an emphasis on safety, orientation to the equipment, proper scanning positions and planes, and general patient care. Students are required to successfully complete required clinical competency examinations supervised by a registered MRI technologist or clinical preceptor.

Pre-requisite: MR303

MR307 - Physics II

Clock Hours: 24

Continues to provide the student with a comprehensive knowledge of MRI imaging principles, knowledge of the parameters and imaging options used to create MRI images and introduces quality control measures used to maintain image quality. Provides a comprehensive overview of the instrumentation associated with MRI pulse sequences to include spin echo, fast spin echo, gradient echo, inversion recovery, echo planar, parallel imaging, and spectroscopy. Other topics include pulse sequencing, imaging parameters/options and image formation, image contrast, contrast agents, advanced imaging, and post processing techniques.

Pre-requisite: MR305

MR308 - MRI Pathology

Clock Hours: 32

Introduces concepts related to disease and etiological considerations with an emphasis on their appearance on MRI images using various sequences. The information covered should enhance the students' knowledge regarding interpretation of clinical information provided on the requisition and/or the patient's chart. The course will include a written research paper on a chosen pathology with an oral presentation.

Pre-requisite: MR300

ETH101 - Healthcare Ethics and Law

Clock Hours: 24

This course is designed to provide the student with a fundamental background in healthcare ethics and law. The historical and philosophical bases of ethics as well as the elements of ethical behavior are discussed. The student will examine a variety of ethical issues and dilemmas that occur in clinical practice. An introduction to legal terminology, concepts and principles will also be presented. Topics include misconduct, malpractice, unintentional and intentional torts, HIPAA standards and compliance,

legal and professional standards and the ASRT scope of practice. The importance of proper documentation and informed consent will be emphasized.

Pre-requisite: Admission to the program

MR309 - Intermediate Clinical Experience II

Clock Hours: 336

Supervised sessions emphasizing development of medical imaging skills. Practical application of MRI imaging with an emphasis on safety, orientation to the equipment, proper scanning positions and planes, and general patient care. Students are required to successfully complete required clinical competency examinations supervised by a registered MRI technologist or clinical preceptor.

Pre-requisite: MR306

MR310 - Advanced Imaging

Clock Hours: 32

Discussion of advanced MRI imaging topics to include fusion imaging, neurography, 3D printing and modeling, and remote scanning. Discussion of emerging trends in MRI to include artificial intelligence, quantitative MR, and MR lymphangiography. Guests with experience in these areas will be invited to speak.

Pre-requisite: MR304, MR307

MR311 - Registry Review

Clock Hours: 32

Provides a review of basic knowledge from previous courses and help the student prepare for the American Registry of Radiologic Technologist's ARRT National Registry Examination.

Pre-requisite: MR304, MR307

MR312 - Advanced Clinical Experience

Clock Hours: 448

Supervised sessions emphasizing development of medical imaging skills. Practical application of MRI imaging with an emphasis on safety, orientation to the equipment, proper scanning positions and planes, and general patient care. Students are required to successfully complete required clinical competency examinations supervised by a registered MRI technologist or clinical preceptor.

Pre-requisite: MR309

Post-Primary Magnetic Resonance Imaging (MRI)

MRI104 - Introduction to Magnetic Resonance Imaging Online

Clock Hours: 24

This course is delivered online and provides the student with information necessary to enter into the magnetic resonance imaging clinical setting. Topics to include: Basic principles; screening procedures; patient monitoring; dose; safety precautions; contrast agents used; contraindications; equipment operated; professional roles and behavior; processing of images; routine examinations and protocols utilized; image artifacts; and compensation. Students will receive an introduction to the physics associated with magnetic resonance imaging.

Pre-requisite: Admission to the program

MRI102 - Cross Sectional Anatomy and Pathology

Clock Hours: 48

This course is delivered in a traditional classroom style and provides the student with fundamental anatomy and pathology associated with computed tomography and magnetic resonance imaging of the head, neck, face, spine, thorax, abdomen, pelvis, and upper and lower extremities. The various structures will be demonstrated in the axial, sagittal and coronal imaging planes.

Pre-requisite: Admission to Computed Tomography or Magnetic Resonance Imaging Programs

MRI103 - Magnetic Resonance Imaging Physics*

Clock Hours: 48

This course is delivered in a traditional classroom style or online and provides the student with the principles of MRI scanning and the physics related to obtaining an MRI signal. Topics will include: Image weighting and contrast; spatial encoding and image formation; parameters and trade-offs; pulse sequences; flow phenomena; artifacts and their compensation; vascular and cardiac imaging; contrast agents; functional imaging techniques; instrumentation; and equipment.

MRI201 - Magnetic Resonance Imaging Physics Online*

Clock Hours: 48

This course is delivered in a traditional classroom style or online and provides the student with the principles of MRI scanning and the physics related to obtaining an MRI signal. Topics will include: Image weighting and contrast; spatial encoding and image formation; parameters and trade-offs; pulse sequences; flow phenomena; artifacts and their compensation; vascular and cardiac imaging; contrast agents; functional imaging techniques; instrumentation; and equipment.

Pre-requisite: Program Approval

MRI200 - Magnetic Resonance Imaging Clinical Experience

Clock Hours: 300-500

Magnetic resonance imaging technologists are highly skilled professionals who use powerful magnets to obtain detailed images of the various structures in the human body. MRI technologists must have the ability to interact effectively with physicians and compassionately toward patients. The clinical portion of the MRI Program is designed to prepare students to be competent, efficient working technologists. Upon successful completion of the MRI clinical course, students will have met the examination requirements for the ARRT and be eligible to sit for the MRI certification exam.

Pre-requisite: Introduction to Magnetic Resonance Imaging

*Students will only take MRI 103 OR MRI 201. Taking MRI 201 depends on program approval.

Radiologic Technology (Beachwood), Radiologic Technology (Mercy)

RT101 - Patient Care in Radiography

Clock Hours: 64

This course provides an overview of radiography in addition to the basic concepts of patient care, infection control, and the role of the radiographer as a member of the health care team. Content includes pharmacology and administration of diagnostic contrast agents and intravenous medications; patient assessment; and vital signs. Topics include: critical thinking; history of radiography; professional roles and behavior; professional attitudes and communications. Also included will be hospital and departmental organization, and hospital and program affiliation.

Pre-requisite: Admission to Radiography Program

TECH101 - Radiographic Technique I

Clock Hours: 64

This course is designed to give the student a working knowledge of the exposure factors required to produce quality radiographs. The material presented will enable the student to vary factors to control density, contrast, visibility of detail, recorded detail, distortion, radiographic equipment, computed/digital radiography and the use of automatic exposure devices. Exposure compensation and technique calculations are emphasized.

Pre-requisite: Admission to Radiography Program

POS101 - Radiographic Positioning and Procedures I

Clock Hours: 64

This course serves as an introduction to the basics of diagnostic radiography. The material presented will enable a student to interpret radiology requisitions; recognize the structure and organs visualized in a radiograph; and correctly position a patient for various radiologic examinations including pediatric and geriatric patients. A section on radiation protection will introduce the student to proper methods of protecting both the patient and themselves from ionizing radiation. Radiographic Positioning and Procedures I also includes the preliminary steps to taking a radiograph; general radiographic anatomy and positioning terminology; and anatomy and radiography of the thoracic viscera, upper extremities, lower extremities, shoulder girdle, bony thorax, urinary system, abdomen, pelvis, femur and hip. The student will participate in corresponding radiographic positioning labs.

*There is a corresponding sonography scan lab with this course.

Pre-requisite: Admission to Radiography Program

POSL101 - Radiographic Lab

Clock Hours: 64

Selected exercises designed to reinforce concepts covered in POS 101.

This course serves as an introduction to the basics of diagnostic radiography. The material presented will enable a student to interpret radiology requisitions; recognize the structure and organs visualized in a radiograph; and correctly position a patient for various radiologic examinations including pediatric and geriatric patients. A section on radiation protection will introduce the student to proper methods of protecting both the patient and themselves from ionizing radiation. Radiographic Positioning and Procedures I also includes the preliminary steps to taking a radiograph; general radiographic anatomy and positioning terminology; and anatomy and radiography of the thoracic viscera, upper extremities, lower extremities, shoulder girdle, bony thorax, urinary system, abdomen, pelvis, femur and hip. The student will participate in corresponding radiographic positioning labs.

Pre-requisite: Admission to Radiography Program

CL101 - Introductory Clinical Experience I

Clock Hours: 112

Supervised sessions emphasizing development of medical imaging skills. Practical application of radiographic positioning with emphasis on the thoracic viscera, upper extremities, lower extremities and shoulder girdle. Designed to give the student an introduction to the basics of diagnostic radiography in the clinical setting. Clinical experience in hospital environment for eight weeks, two and a half days a week.

Pre-requisite: Admission to Radiography Program

CL101M - Introductory Clinical Experience I (Mercy)

Clock Hours: 256

Supervised sessions emphasizing development of medical imaging skills. Practical application of radiographic positioning with emphasis on the thoracic viscera, upper extremities, lower extremities and shoulder girdle. Designed to give the student an introduction to the basics of diagnostic radiography in the clinical setting. Clinical experience in hospital environment for eight weeks, two and a half days a week.

Pre-requisite: Admission to Radiography Program

TECH102 - Radiographic Technique II

Clock Hours: 32

The course is designed to give an understanding of the components, principles and operation of digital imaging systems found in diagnostic imaging. Factors that impact image acquisition, display, archiving and retrieval are discussed. Guidelines for selecting exposure factors and evaluating images within a digital system assist students to bridge between film-based and digital systems. Principles of digital quality assurance and maintenance are presented.

Pre-requisite: TECH101

POS102 - Radiographic Positioning and Procedures II

Clock Hours: 32

This course advances and increases the student's knowledge of diagnostic radiographic positioning. This course will cover the anatomy, positioning and radiography of the vertebral column, sacroiliac joints, digestive system, biliary system, skull, facial bones and paranasal sinuses. Trauma and surgical radiography will also be covered. The students will also participate in corresponding radiographic positioning labs.

*There is a corresponding sonography scan lab with this course.

Pre-requisites: POS 101, POSL 101

POSL102 - Radiographic Lab

Clock Hours: 64

Selected exercises designed to reinforce concepts covered in POS102.

This course advances and increases the student's knowledge of diagnostic radiographic positioning. This course will cover the anatomy, positioning and radiography of the vertebral column, sacroiliac joints, digestive system, biliary system, skull, facial bones and paranasal sinuses. Trauma and surgical radiography will also be covered. The students will also participate in corresponding radiographic positioning labs.

Pre-requisites: POS101, POSL101

PHY102 - Principles of Radiation Physics

Clock Hours: 32

This course is designed to present the student with the fundamentals of electrical and radiation physics and the basic principles underlying the operation of X-ray equipment and the circuit and tube components. Topics will include the radiation concepts of matter, energy, electricity, electromagnetism and the properties of x-rays. This course will also present the nature and characteristics of radiation, X-ray production, units of measure and the fundamentals of photon interactions with matter. Mammographic, fluoroscopic and mobile equipment will be covered and tube rating charts and radiographic quality assurance and quality control will also be discussed.

Pre-requisites: TECH101

CL102 - Introductory Clinical Experience II

Clock Hours: 336

Supervised sessions emphasizing development of medical imaging skills. Practical application of radiographic positioning with emphasis on the vertebral column; scoliosis; spinal fusion; sacroiliac joints; bony thorax (sternum, sternoclavicular joints, ribs); digestive system; urinary system; biliary tract and gallbladder; abdomen; pelvis; femur; and hip radiography. Students are required to successfully complete

15 clinical competency examinations supervised by a registered radiographer or clinical instructor. Clinical experience in hospital environment for 16 weeks, four days a week.

Pre-requisite: CL101

CL102M - Introductory Clinical Experience II (Mercy)

Clock Hours: 256

Supervised sessions emphasizing development of medical imaging skills. Practical application of radiographic positioning with emphasis on the vertebral column; scoliosis; spinal fusion; sacroiliac joints; bony thorax (sternum, sternoclavicular joints, ribs); digestive system; urinary system; biliary tract and gallbladder; abdomen; pelvis; femur; and hip radiography. Students are required to successfully complete 15 clinical competency examinations supervised by a registered radiographer or clinical instructor. Clinical experience in hospital environment for 16 weeks, four days a week.

Pre-requisite: CL101M

ETH101 - Healthcare Ethics and Law

Clock Hours: 24

This course is designed to provide the student with a fundamental background in healthcare ethics and law. The historical and philosophical bases of ethics as well as the elements of ethical behavior are discussed. The student will examine a variety of ethical issues and dilemmas that occur in clinical practice. An introduction to legal terminology, concepts and principles will also be presented. Topics include misconduct, malpractice, unintentional and intentional torts, HIPAA standards and compliance, legal and professional standards and the ASRT scope of practice. The importance of proper documentation and informed consent will be emphasized.

Pre-requisites: RT101

POS 201 - Advanced Radiographic Procedures

Clock Hours: 24

Advanced Radiographic Procedures will include radiographic anatomy and positioning terminology that are relevant to the following: contrast arthrography, long bone measurement, and radiography of the mouth, salivary glands and anterior neck, reproductive systems, and mammography. Additional topics include radiation oncology, ultrasound, nuclear medicine, and bone densitometry.

Pre-requisite: POS102

BIO201 - Radiation Biology and Protection

Clock Hours: 32

This course provides the student with information on the fundamental principles of radiation protection and radiation biology. Knowledge provided in this course is essential to understanding the biological effects of ionizing radiation and radiation protection at a basic scientific level and will serve as a standard for radiographers to promote the safe use of medical ionizing radiation. The course includes the study of legal and ethical radiation protection responsibilities of radiation workers, personnel monitoring devices, public and occupational dose limits, theory and operation of radiation detection devices, and state regulations governing radiation protection practices. Additional topics include the study of radiation sources, units of measure, effective dose limits, and biologic effects of radiation.

Pre-requisite: PHY102

CL103 - Intermediate Clinical Experience I

Clock Hours: 336

Supervised sessions emphasizing development of medical imaging skills. Practical application of radiographic positioning with emphasis on the skull, facial bones, and paranasal sinuses. Students are required to successfully complete 15 clinical competency examinations supervised by a registered radiographer or clinical instructor.

Clinical experience in hospital environment for 12 weeks, four days a week.

Pre-requisite: CL102

CL103M - Intermediate Clinical Experience I (Mercy)

Clock Hours: 384

Supervised sessions emphasizing development of medical imaging skills. Practical application of radiographic positioning with emphasis on the skull, facial bones, and paranasal sinuses. Students are required to successfully complete 15 clinical competency examinations supervised by a registered radiographer or clinical instructor.

Clinical experience in hospital environment for 12 weeks, four days a week.

Pre-requisite: CL102M

SP201 - Special Procedures

Clock Hours: 24

This course is designed to advance the student's knowledge of specialized procedures in the imaging department. The material presented will enable a student to recognize the structure and organs visualized in a radiograph, and to correctly position a patient for various advanced and special radiologic examinations. Special Procedures will include vascular; cardiac and interventional radiography; central nervous system; magnetic resonance imaging; and computed tomography.

Pre-requisite: POS202

RT202 - Radiographic Analysis

Clock Hours: 32

This course is designed to provide a basis for analyzing the radiographic quality of the following procedures: chest, abdomen, upper extremities, shoulder girdle, lower extremities, hip/pelvis, spine, skull, facial bones, gastrointestinal tract, and pediatric radiography. The students will demonstrate patient assessment, proper positioning, exposure factors, and radiation protection. Included are the importance of minimum imaging standards, discussion of a problem-solving technique for image evaluation and the factors that can affect image quality.

Pre-requisite: TECH101, TECH102

CL201 - Intermediate Clinical Experience II

Clock Hours: 448

Supervised sessions emphasizing development of medical imaging skills. Practical application of radiographic positioning. Students are required to successfully complete 20 clinical competency examinations supervised by a registered radiographer or clinical instructor. Clinical experience in hospital environment for 16 weeks, four days a week.

Pre-requisite: CL103

CL201M - Intermediate Clinical Experience II (Mercy)

Clock Hours: 384

Supervised sessions emphasizing development of medical imaging skills. Practical application of radiographic positioning. Students are required to successfully complete 20 clinical competency examinations supervised by a registered radiographer or clinical instructor. Clinical experience in hospital environment for 16 weeks, four days a week.

Pre-requisite: CL103M

PATH 201 - Radiographic Pathology

Clock Hours: 32

This course is designed to introduce concepts related to disease and etiological considerations with emphasis on radiographic appearance of disease and impact on exposure factor selection. The material

covered should enhance the students' knowledge regarding interpretation of clinical information provided on the requisition and/or patient's chart. Case studies and critical thinking exercises allow the student the opportunity to consider the relevance of radiographic procedures with regard to technical and patient considerations. The course also includes a written research paper on a chosen pathology with oral presentation.

Pre-requisite: Anatomy and Physiology (Program Prerequisite)

REG201 - Registry Review I

Clock Hours: 32

This course provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: image production and evaluation; radiographic procedures; anatomy, physiology, pathology, and terminology; equipment operation and quality control; radiation protection; and patient care and education.

Pre-requisite: Departmental Approval

REG202 - Registry Review II

Clock Hours: 32

This course is a continuum of Registry Review I in preparation for the ARRT Registry Examination. This course provides a review of basic knowledge from previous courses and helps the student prepare for the national certification examination for radiographers. Topics include image production and evaluation; radiographic procedures; anatomy, physiology, pathology, and terminology; equipment operation and quality control; radiation protection; and patient care and education.

Pre-requisite: REG201

CL202 - Advanced Clinical Experience

Clock Hours: 448

Supervised sessions emphasizing practical application of radiographic positioning with clinical experience. Emphasis on enhanced student knowledge of pathology and the relation to radiographic imaging quality. Clinical experience will be in the hospital environment for 16 weeks, three days a week.

Pre-requisite: CL201

CL202M - Advanced Clinical Experience

Clock Hours: 384

Supervised sessions emphasizing practical application of radiographic positioning with clinical experience. Emphasis on enhanced student knowledge of pathology and the relation to radiographic imaging quality. Clinical experience will be in the hospital environment for 16 weeks, three days a week.

Pre-requisite: CL201M