The Program Faculty and College reserve the right to make changes to assure the quality, quantity, and effectiveness of education

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# TABLE OF CONTENTS

## Section I  Diagnostic Medical Sonography - The Profession
- Description of the Profession  
- Scope of Practice  
- Overview of the ARDMS  
- The ARDMS Credentials  
- The ARDMS Examinations  
- CCI Examinations  
- Professional Organizations  

## Section II  Program Policies and Procedures
- Introduction  
- Program Goals and Objectives  
- DMS Program Philosophy  
- Rigor of the Program  
- Program Guidelines  
- Technical Standards  
- CPR (Cardiopulmonary Resuscitation)  
- Health Assessment  
- Urinalysis Reports  
- Immunizations  
- Pregnancy Policy  
- Alcohol & Drug Dependency Policy  
- Student Employment Policy  
- Scan Lab Policies  

## Section III  Clinical Success
- Essential Abilities for Clinical Success  
- Clinical Goals  
- Clinical Objectives
Clinical Assignments 29
Travel Expenses 30
Lunches/Breaks 30
Health Insurance 30
Malpractice Insurance 31
Communicable Disease 31
Occurrence Reporting 31
Attendance 32
Exam Log Sheets 33
Clinical Evaluation 34
Clinical Grading 34
General Clinical Policies 35

Section IV  Professional Conduct
Uniforms and Appearance 37
Patient Identification 38
Patient Confidentiality 38
Patient's Modesty 39
Patient's Bill of Rights 39
Unprofessional Conduct 40
Acknowledgement of Unprofessional Conduct Guidelines 43

Section V  Clinical Competency System
Three-Tiered Competency System 45
Removal of Competency 46
Competency and Practice Exam 46
Competency Requirements 50
Acknowledgement of Handbook Guidelines 53
Section I
Diagnostic Medical Sonography
The Profession
Central Ohio Technical College Mission Statement

The mission of Central Ohio Technical College is to meet the technical education and training needs of students and employers in the area.

Description of the Sonography Profession:

Diagnostic medical sonography is a multi-specialty profession comprised of abdominal sonography, breast sonography, cardiac sonography, obstetrics/gynecology sonography, pediatric sonography, phlebology sonography, vascular technology/sonography, and other emerging clinical areas. These diverse areas all use ultrasound as a primary technology in their daily work.

Scope of Practice of the Profession:

The diagnostic medical sonographer is an individual who provides patient care services using ultrasound and related diagnostic procedures. The diagnostic medical sonographer must be educationally prepared and clinically competent as a prerequisite to professional practice. Demonstration and maintenance of competency through certification by a nationally recognized sonography credentialing organization is the standard of practice in sonography, and maintenance of certification in all areas of practice is endorsed. The diagnostic medical sonographer:

• Functions as a delegated agent of the physician; and does not practice independently

Diagnostic medical sonographers are committed to enhanced patient care and continuous quality improvement that increases knowledge and technical competence. Diagnostic medical sonographers use independent, professional, ethical judgment, and critical thinking to safely perform diagnostic sonographic procedures.

Overview of the ARDMS

The American Registry of Diagnostic Medical Sonographers (ARDMS), incorporated in June of 1975, is an independent, nonprofit organization in operation to administer examinations and award credentials in a variety of areas including diagnostic medical sonography, diagnostic cardiac sonography, and vascular technology.
Upon program completion, COTC graduates are eligible to earn the following ARDMS credentials:

<table>
<thead>
<tr>
<th>Major</th>
<th>Certification</th>
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<tr>
<td>General Major</td>
<td>RDMS</td>
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<td>Cardiovascular Major</td>
<td>RDCS</td>
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<td>RVS</td>
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<td>RCS</td>
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Additional sub-specialty credentials include abdomen, obstetrics and gynecology, fetal echocardiography, musculoskeletal, and breast (RDMS) for general sonographers; adult, pediatric and fetal echocardiography (RDCS) for cardiac sonographers.

To date, the ARDMS has certified more than 100,000 individuals, and is the recognized as the standard for ultrasound certification. The ARDMS credentials represent personal achievement of a highly recognized professional standard of excellence. Credentials awarded by the ARDMS are widely accepted, nationally and in several countries outside of the U.S.

The only means of obtaining an ARDMS credential is by examination. Applicants must satisfy at least one of the Examination Prerequisites, being deemed "eligible," before an ARDMS examination will be administered. Eligible individuals are accepted as candidates and are then required to pass two comprehensive examinations: (1) a Sonographic principles and instrumentation examination and (2) at least one corresponding specialty examination - to earn a sonography credential. This structure allows for assessment of these two equally important components of the credential. A candidate is not entitled to use a credential offered by the ARDMS until officially notified that the credential has been earned.
### ARDMS Credentials

<table>
<thead>
<tr>
<th>Physical Principles/Instrumentation Exam</th>
<th>Specialty Examination(s) Options</th>
<th>Credential</th>
</tr>
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<tbody>
<tr>
<td>Sonographic Physics &amp; Instrumentation (SPI)</td>
<td>Abdomen (AB) Obstetrics/Gynecology (OB/GYN) Fetal Echocardiography (FE) Breast (BR) Musculoskeletal (MSK)</td>
<td>Registered Diagnostic Medical Sonographer (RDMS)</td>
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<tr>
<td></td>
<td>Adult Echocardiography (AE) Pediatric Echocardiography (PE) Fetal Echocardiography (FE)</td>
<td>Registered Diagnostic Cardiac Sonographer (RDCS)</td>
</tr>
<tr>
<td></td>
<td>Vascular Technology (VT)</td>
<td>Registered Vascular Technologist (RVT)</td>
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</table>

Candidates must complete both the SPI and the specialty area examination components within five years (regardless of the sequence in which the examinations are taken). Candidates who do not complete their credential within the five-year time frame must retake the examination they had previously passed. This policy does not apply to registrants seeking additional specialties within the same credential area.

### The ARDMS Examinations

The Sonographic Physics & Instrumentation examination contains approximately 120 multiple-choice items and is two hours in length. The specialty examinations for the RDMS, RDCS and RVT credentials are three hours in length and contain approximately 120 to 170 multiple-choice questions each. Currently, each exam costs approximately $200-$250. Candidates, who are unsuccessful in passing an examination, may reapply, completing a new
application, to take the examination again. When reapplying, candidates may begin a new eligibility
period 60 days from the previous examination date. Current policies do not limit the number of
attempts to pass examinations.

CCI Examinations
Cardiovascular Credentialing International is an alternative credentialing agency for cardiovascular
sonographers. CCI is an independent not-for-profit corporation established for the purpose of
administering credentialing examinations as an independent credentialing agency. CCI began
credentialing cardiovascular professionals in 1968.
CCI offers a variety of credentialing examinations including:

- ACS: Advanced Cardiac Sonographer
- RCS: Registered Cardiac Sonographer
- RVS: Registered Vascular Specialist

Professional Organizations
Several professional organizations for Diagnostic Medical Sonographers exist. All actively work for the
advancement of the profession and for continued recognition of quality patient care. Students are encouraging to become active members in professional societies. Popular organizations include:

National Organizations:
The Society of Diagnostic Medical Sonography (SDMS)
    www.sdms.org

The American Institute of Ultrasound in Medicine (AIUM)
    www.aium.org

The Society of Vascular Ultrasound (SVU)
    www.svunet.org

The American Society of Echocardiographers (ASE)
    www.asecho.org

Local Organization:

Central Ohio Ultrasound Society (COUS)
Section II
Program Policies and Procedures
Introduction

Students enrolled in the Central Ohio Technical College Diagnostic Medical Sonography Program will be responsible for observing College rules and regulations as stated in the COTC student handbook available on the COTC web site. All Sonography students are urged to become familiar with the Sonography Program, the policies, procedures, and academic requirements. Failure to do so will not exempt or excuse the student from full compliance.

The Diagnostic Medical Sonography Program at Central Ohio Technical College 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.

The program is rigorously evaluated by external agencies utilizing specific professional criteria in order to achieve/maintain accreditation status. Moreover, faculty and administration constantly assess/identify trends and consider/plan potential advances for the programs and their enhancement. An Advisory Committee of community health care and education leaders offer input on the quality, effectiveness and development of the programs. Student data from courses is a vital component in the assessment process. Student representatives are welcome participants at standing program committees.

The DMS faculty views each student as a unique person with special talents, abilities, needs, and goals. To facilitate teaching and learning, the faculty functions as sonography experts and as nurturers of students. The faculty continuously endeavors to provide an environment that assists students to realize their full potential. Using a student-centered approach, the program will prepare graduates with the knowledge, skills and attitudes necessary to continuously improve the quality and safety of the healthcare systems in which they work.
DMS Program Chain of Command

A chain of command has been instituted to provide students with a supervisor to whom they may ask questions or report problems. Program concerns are to be directed to DMS faculty members, the Clinical Coordinator, and ultimately, to the Program Director. If indicated, only after following the chain of command, concerns should be directed to the Dean for Health Sciences.

Program Goal

To prepare competent entry-level general and/or cardiovascular sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Program Learning Objectives

Upon successful completion of the Diagnostic Medical Sonography Program, the student should be able to:

1. Utilize oral and written communication
2. Provide basic patient care and comfort
3. Demonstrate knowledge and understanding of human gross anatomy and sectional anatomy
4. Demonstrate knowledge and understanding of physiology, pathology, and pathophysiology
5. Demonstrate knowledge and understanding of acoustic physics, Doppler ultrasound principles, and ultrasound instrumentation
6. Demonstrate knowledge and understanding of the interaction between ultrasound and tissue and the probability of biological effects in clinical examinations
7. Employ professional judgment and discretion
8. Understand the fundamental elements for implementing a quality assurance and improvement program, and the policies, protocols, and procedures for the general function of the ultrasound laboratory
9. Recognize the importance of continuing education
10. Recognize the importance of, and employ, ergonomically correct scanning techniques

DMS Program Mission Statement

To provide quality education in the field of diagnostic medical sonography, prepare students as entry-level sonographers with a high degree of skill, and to develop student professionalism through training and mentorship.
DMS Program Philosophy

Man is a unique social being who has a biological and cultural inheritance which enables him to utilize internal and external resources to adapt to a constantly changing environment. Respect must be shown for personal worth, dignity, autonomy, and individuality. Man has a right to the health care necessary to maintain and enhance his ability to function as a human being.

Sonography assists man to maintain, regain, and/or attain high-level wellness in whatever environment he finds himself. Sonography involves providing diagnostic services with consideration for human dignity and the uniqueness of man. The faculty believes that sonography education is concerned with the total system in which it operates. The program of learning should take place in institutions of higher education and that the curriculum should reflect a balance between sonography and general education. Sonography education focuses on the scientific process of problem solving based on the knowledge and understanding of human behavior, communications, basic science, and sonography in a health care setting. Learning is the intellectual process by which changes are brought about in an individual's response to his environment. Learning occurs in a climate which encourages a spirit of inquiry, offers a cooperative feeling and integrity to the learner, and provides for on-going evaluation. Learning is facilitated when personal goals are sought and material is relevant to the learner and presented in a manner which is comprehensible. When these principles of learning are utilized, the faculty believes that education is a dynamic process in which faculty act as facilitators and resource persons thereby assisting students to assume responsibility for self-direction.

As a member of the health team, the graduate functions as a sonographer performing sonographic procedures with a high degree of skill. The associate degree graduate has a responsibility to belong to professional organizations and participate in educational activities. Benefits derived from these activities should be shared with colleagues to enhance the effectiveness of health care.

Rigor of the DMS Program

The DMS program is one of the most rigorous programs in the College, demanding determination, stamina, personal planning and time devoted to study. Preparation for both theory and clinical activities requires fulltime effort. Therefore, students are encouraged to reduce employment to a minimum in order to maintain the education focus. Clinical days and hours will vary each semester. Flexibility of
time as well as reliable personal transportation is required.

Time management is a key to student success. Each student is responsible for meeting program requirements, including availability for assigned clinical experience, which may occur on day, evening, night, weekday and weekend hours. Therefore, flexible work scheduling and childcare arrangements are essential. Clinical courses, (i.e., those involving clinical experience), require additional study time beyond the actual scheduled classroom and clinical hours.

Policies of the Programs are guidelines to promote students' successful completion, to meet requirements of external review agencies and affiliate institutions and to ensure equitable treatment of students.

**General Program Guidelines**

Guidelines have been established by the Diagnostic Medical Sonography (DMS) Program. All enrolling students are urged to become familiar with the following regulations and requirements.

1. **Acceptance** into the DMS Program is valid only for the semester and year specified.

   - Students accepted into the DMS program with Diagnostic Medical Sonography Program transfer credits from another educational institution:
     - Even if selected into the program, the student MUST provide a recommendation letter from the Program Director of the previous DMS program, mailed directly from the college/university to the attention of the COTC Diagnostic Medical Sonography Program Director. The letter must also include dates of enrollment, a list of DMS courses completed, and a statement of clinical performance.
     - Students unable to provide this required documentation prior to the beginning of the program, will forfeit their seat in the DMS program.
     - Transfer credits for DMS courses completed at other institutions will be accepted at the discretion of the Program Director. A syllabus must be provided for review for each DMS course. Transfer credit will not be awarded for clinical courses completed at other institutions.

2. **Requirements for advancement** in the DMS Program are as follows:

   A. All course prerequisites must be met before admission to a course.
   B. A grade of "C" or better is required for all DMS courses.
   C. A student may repeat each DMS course only once, and only with permission by the Program Director.
   D. A student must adhere to all policies and procedures of the program and the College in order to be eligible for graduation.
3. **Re-admission** to the Diagnostic Medical Sonography Program is determined by the DMS Re-admission Committee. Re-admission is not automatic or guaranteed. Students seeking re-admission must apply in writing within one year of leaving the program. The request must be one semester prior to the semester in which the student wishes to enroll. No requests will be taken more than two semesters before the anticipated enrollment. Students must also adhere to the following:

A. The student must submit a letter to the Program Director addressing the reason for the previous failure or withdraw. It is the student's responsibility to prove that the reason(s) for the previous failure/withdraw has been altered and that the student has a strong probability of successfully completing the program at this time.

B. The student must have a minimum cumulative GPA at COTC of 2.00 to request re-admission.

C. The student who has been out for more than one semester must successfully demonstrate proficiency in the clinical skills necessary to meet prerequisite criteria. This may be demonstrated through simulations prior to enrollment. Program faculty and/or clinical personnel will serve as evaluators. All competencies previously obtained must be duplicated satisfactorily and include image evaluation depending on the level of clinical skill when failure/withdraw occurred. Admission into the program is contingent upon demonstrating all prerequisites and skills for the clinical sequence. If the student fails to demonstrate proficiency, the student may be required to repeat previously completed clinical rotations. *All clinical competencies and clinical training verification expires after one year from leaving the DMS program.*

D. The committee may, at their discretion, request a personal interview with the readmission candidate for clarification.

E. In addition to the letter, the student must also complete and submit to the Program Director a Re-Admission form.

F. Students may apply only once for re-admission into the DMS Program, regardless of the major (general or cardiovascular). Students dismissed due didactic academic failure or withdrawal may re-apply, depending on circumstance. Students who are dismissed from the program due to behavioral or unprofessional conduct are **not** eligible for re-application.

G. Students will be considered for re-admission based on available space, available clinical facility space and previous didactic and clinical performance. *Re-Admission into the DMS program is not guaranteed. Readmission is*
dependent on available “seats” in the DMS program. Clinical placements are also limited with priority given to enrolled DMS students.

H. The decision of the committee will be final.

**Technical Standards**

Technical standards are defined as the student's ability to accomplish the essential requirements of employment in the Sonography profession or participation in a DMS program. Technical standards for the DMS program include all nonacademic criteria and must be based on tasks performed by a sonographer. They also provide students with an understanding of physical demands required by the program and the profession. This is a requirement of the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

All students in the DMS program must possess the following abilities to successfully attain the skills needed to practice in the sonography profession. Students unable to demonstrate the following technical standards will not be enrolled in the DMS program.

**Communication Ability**

1. Sufficient hearing to assess patient needs and identify equipment signals.
2. Sufficient vocalization skills to instruct a patient relative to sonographic maneuvers and obtain a health history.

**Visual Acuity**

1. Identify 16 shades of gray from the gray scale provided.
2. Distinguish between the colors of green, blue, black, red and yellow on the color bar provided.
3. Sufficient vision to observe patients, manipulate sonographic equipment, and evaluate image quality.

**Physical Ability**

1. Sufficient gross motor coordination to exert up to 20 pounds of force occasionally, 10 pounds of force frequently, and/or a negligible amount of force constantly to move objects.
2. Sufficient fine motor coordination to hold simultaneously a transducer and input data on a sonographic control panel.

**Environmental Requirements**

The work involves risks or discomforts that require special safety precautions, working with sharps (needles, razor blades, scalpels, etc.), chemicals and infectious disease.
Employees may be required to use protective clothing or gear such as masks, goggles, and gloves.

**CPR (Cardiopulmonary Resuscitation)**

Students will be learning in the clinical environment and performing sonographic procedures on patients who are in critical condition or have sustained life-threatening injuries. Knowledge of resuscitation techniques is imperative. Therefore, Central Ohio Technical College requires that all sonography students be certified in CPR. Proof of such certification is required prior to the first clinical experience though the remainder of the DMS program. Failure to comply will result in an unexcused absence. Unexcused absences cannot be made up and the student will receive a 5% overall clinical grade reduction for each unexcused absence.

It is the student's responsibility to keep certification current for the duration of their education. In the event that CPR certification expires during the program, the student will be unable to return to their assigned clinical facility until CPR certification has been renewed. Any absences occurring due to CPR recertification will be subject to grade penalty as outlined in the course syllabus. CPR certification must be approved by the American Heart Association. Upon completion of the CPR course, present your card to the Clinical Coordinator so it may be entered in your record.

The following guidelines have been adopted by Central Ohio Technical College relative to instituting CPR:

1. Whenever possible, the affiliate staff should make the decision to begin CPR on a patient.
2. In the event of a cardiac and/or respiratory arrest, the student will be responsible for
   a. calling for help
   b. placing the patient in a supine position (lowering side rails if in bed)
   c. opening the airway
3. If help does not arrive within one minute, the student will call again for assistance.
4. CPR may be initiated based upon the student's current knowledge of this patient.

**Health Assessment**

Students are required to submit a personal health assessment form to the Clinical Coordinator prior to clinical assignment. These forms will be kept confidential. Students will not be
assigned clinically until the above is completed. A physical performed at your expense may be required by clinical sites. The student must inform the DMS Program Director of any disability, change in health status and/or therapy which may affect ability to safely perform the role of student sonographer. The student may be required to provide a written release from their physician, verifying that they may perform without limitations.

**Urinalysis**

Students will be required to complete a urinalysis prior to their first clinical rotation. Students will be notified of urinalysis testing due dates randomly. After the urinalysis completion dates are announced, the student has 7 days to complete the drug testing. Failing to complete the assigned drug testing during the announced 7 day period is insubordination and therefore subject to dismissal from the program. A positive urinalysis will result in immediate dismissal from the DMS program without the option for re-admission. COTC reserves the right to repeat urinalysis/drug testing while students are enrolled in the DMS Program.

**Immunizations**

Students admitted into the DMS program must comply with immunization and other health requirements before the first day of assigned clinical rotations. Students are expected to remain in compliance as long as they are actively enrolled.

COTC is contractually obligated to comply with the policies of our partner clinical affiliates. Therefore, to protect students, patients, and colleagues, students are required to provide evidence of adequate immunity to the following diseases. This list is subject to change – students will be promptly notified of any changes.

**TB: this test is required by the State of Ohio**

- A 2-step Mantoux test is required.
- The student will comply with annual TB testing during the time they are enrolled in the DMS program. The test shall be repeated annually within thirty days of the anniversary date of the last
testing. CLARIFICATION: DMS students are expected to complete annual Tb testing prior to their TB due date. Failure to comply will result in an unexcused absence. Unexcused absences cannot be made up and the student will receive a 5% overall clinical grade reduction for each unexcused absence.

- Written evidence must be provided.
- If there is a history of a positive TB skin test, a chest x-ray report showing no evidence of active disease is required. This student will also complete a TB screening questionnaire upon admission, and annually during the time they are enrolled in the DMS program. The student is to report promptly any symptoms suggesting tuberculosis.

Students who have received a TB vaccination, must show documentation of TB vaccination and may be required to undergo a chest x-ray showing no evidence of active disease.

**Tetanus:**

- A tetanus/diphtheria (Tdap) booster is required if 10 years have elapsed since the last booster.
- The CDC Advisory Committee on Immunization Practices recommends that all healthcare personnel (HCP), regardless of age, should receive a single dose of Tdap as soon as feasible if they have not previously received Tdap and regardless of the time since last Td dose.

**Measles, Mumps and Rubella:**

- Student must provide written evidence of the required two vaccines; OR
- Provide written documentation of titer results

**Varicella:**

- Student must provide self-report of history of varicella disease (chickenpox); OR
- If unknown or no history of disease, student must provide results of varicella titer; OR
- Provide written documentation of two (2) varicella vaccines given no less than one month apart.

**Hepatitis B:**

- Provide written evidence from the healthcare provider indicating the three dates you have received the vaccine series; OR
- Provide evidence the student has started the series and has had at least the first injection in the 3
series by the first day of clinicals; OR

- Provide written documentation of titer results

**Flu:**

- Student must provide written evidence of having received the seasonal flu vaccine within the past 12 months, AND
- Student will maintain compliance with annual seasonal flu vaccine requirement during the time they are enrolled in the DMS program. Failure to comply will result in an unexcused absence. Unexcused absences cannot be made up and the student will receive a 5% overall clinical grade reduction for each unexcused absence.

**Pertussis (Whooping Cough)**

- Students must provide written evidence of having received the pertussis vaccination. The immunization forms must be completed by a physician or nurse. **All documentation must be complete and all required immunizations should be current.** Students must keep a set of all personal health information. **The DMS Department retains student health files for one semester after graduation. After one semester, all health files are destroyed.**

Students who are identified as having possible **latex allergy** must be medically evaluated about potential risk, and are strongly urged to consider another field since latex is prevalent in the healthcare environment. Students with confirmed latex allergy continue in the program at their own risk. The College assumes no responsibility for exposures and possible resulting student health problems.

**Important notice: Students are not permitted to go to their clinical experience until all required health information is provided and all required immunization and other health requirements are complete.** Failure to comply will result in an unexcused absence. Unexcused absences cannot be made up and the student will receive a 5% overall clinical grade reduction for each unexcused absence.
**Immunization Waivers**

A student may receive a waiver on health grounds if he or she presents a written statement from a licensed physician indicating that immunization against any or all of the diseases for which immunization is required is medically contraindicated, detrimental to, or not in the best interest of the student. Specific reasons should be noted, such as allergy to components of the vaccine. The physician’s statement shall document whether the contraindication is permanent or temporary, and if temporary, provide assurance that the student will receive immunization(s) at the first reasonable opportunity. (For example, rubella vaccine should not be given to pregnant women.) If the student fails to complete the immunizations and provide evidence of same, the student will not be permitted to enter or remain in the program.

- If the student objects to any immunization due to religious beliefs, he or she must submit a signed written statement stating that they have chosen not to be immunized because he or she is an adherent to a religion the teachings of which are opposed to such immunizations.

- Students who are unwilling or unable to comply with the immunization policy of the DMS program must understand that some clinical agencies prohibit the presence of unvaccinated students at their facility. While COTC will make reasonable efforts to find appropriate alternate clinical rotations for these students, there is always the risk the student will not be permitted to complete clinical training will result in dismissal from the DMS program.

**STUDENT HEALTH: CHRONIC HEPATITIS B INFECTION**

Applicants with chronic hepatitis B infection are eligible for admission to Allied Health Programs, and shall not be denied admission based solely on their hepatitis B status. This is in compliance with the Americans with Disabilities Act of 1990 (ADA), Section 504 of the Rehabilitation Act of 1973 (Section 504), and Title VI of the Civil Rights Act of 1964 (Title VI).

Federal civil rights laws broadly prohibit discrimination on the basis of disability. However, those laws do not require schools of higher education to permit an individual with a disability to
participate in particular activities if doing so would pose a direct threat to the health or safety of others. All students with chronic hepatitis B infection who are applying to a Nursing or Allied Health program will be evaluated on an individual basis to determine if there is a direct threat to the health or safety of others.

The Centers for Disease Control (CDC) provides the following recommendations for the management of students who have hepatitis B – recommendations with which COTC will comply:

Chronic hepatitis B infection, in itself, should not preclude the study or practice of Nursing or Allied Health professions. Pre-notification to patients of the hepatitis B status of the clinician should be discouraged. Nursing and Allied Health students who do not perform exposure-prone invasive procedures should not be subject to any restrictions of their activities or studies. Standard precautions should be rigorously adhered to in all health-care settings.

All student health records shall remain confidential. Questions or concerns about any student’s health status shall be referred to the Dean for Health Sciences for review.

Pregnancy Policy

Any student who knows she is pregnant must inform the Program Director as soon as possible. It is the decision of the student whether to continue or withdraw from the sonography program. If the student chooses to continue, she is expected to meet all objectives and clinical competencies of each sonography course. Should the student choose to withdraw from the program, she must follow the re-admission guidelines and re-admission is not guaranteed.

Alcohol and Drug Dependency Policy

The Central Ohio Technical College Diagnostic Medical Sonography Program policy prohibits all students from unlawful manufacture, distribution, dispensing, possession, or use of alcohol or controlled substance while on the grounds of the clinical affiliates or the college campus. This policy is in conjunction with an effort of the affiliates and the college to provide a safe and healthy work environment. The abuse of drugs or alcohol is unsafe for both patients and workers.
If any student demonstrates an impaired ability to perform his/her job duties, is suspected of alcohol or drug abuse, or is suspected of violating this policy, he/she will be removed from the patient areas. The student will be immediately required to submit to a medical evaluation and/or a drug or alcohol screening. If any detectable level of alcohol/drugs not accountable for by prescription, is discovered the student will be dismissed from the DMS program and will be required to complete a treatment program for rehabilitation to reapply to the program. If the student refuses to obtain treatment, he/she may either withdraw or fail the course but forfeits the right to apply for readmission. The medical examination may be requested by either program faculty or the affiliate clinical instructor or designated representative.

**Student Employment Policy**

All students have the privilege to obtain any type of employment while enrolled in the Diagnostic Medical Sonography Program. It is recommended that students accepting employment allocate adequate time for academic responsibilities.

1. Students who accept employment at an affiliated clinical site cannot be scheduled as an employee during the same time as normally scheduled clinical assignments.

2. It is the responsibility of the student to avoid conflicts in scheduling. A student may not be paid or viewed as an employee while scheduled in the clinical area as a student. The student is responsible for assuring that this does not happen. If this occurs, the student may be immediately dismissed from the program.

3. A student who is working as an employee is not eligible for competency evaluations. In the event that this occurs, the student may be immediately dismissed from the program.

4. Also, currently employed sonographers who are completing their degree in diagnostic medical sonography at COTC may not be allowed to fulfill their clinical requirements at the department in which they are employed.

5. Violation of this policy constitutes non-compliance with program policies and will result in immediate dismissal from the program.
**Scan Lab and Equipment Usage Policies**

1. The ultrasound machines may only be used when instructed and under direct supervision of DMS faculty. Unauthorized usage or misuse will result in dismissal from the DMS program.

2. Beds and equipment must be wiped down after each lab session.

3. Gel bottles must be refilled after each lab session.

4. Dirty laundry, gloves, papers must be picked up after each lab session.

5. No food or beverages are allowed near the lab equipment.

The Diagnostic Medical Sonography program is a "hands-on" technology program - students learn by doing the required skills in campus lab and clinical settings. The sonography curriculum includes hands-on scanning experience in a lab setting. In two scan lab courses, students practice performing sonographic examinations on mock patients, other students, and volunteers. Sonography students take turns being the scanner and being the “mock patient” and participation as a scanner is mandatory. In the Diagnostic Medical Sonography Program, you will be asked to have noninvasive ultrasound examinations performed on you in a lab setting, under direct supervision of DMS faculty. If you are unable or unwilling to be a “mock patient” for any reason, please meet with the Program Director and accommodations will be arranged. Please be advised that females will be required to wear a tank-top and shorts and males will be required to wear shorts but no shirt during the scan lab courses to allow for scanning access. If you are unable to meet the clothing requirements due to religious beliefs, please meet with the Program Director and accommodations will be arranged.

Diagnostic imaging often requires the sonographer / student sonographer to push and apply pressure with the ultrasound transducer. When excessive, repeated force or pressure is identified by faculty, or if there is a complaint from a “mock patient”, the student will be corrected and counseled on appropriate scanning techniques. After verbal and / or written notification of the concern, if the student’s scanning ability fails to improve or if the student continues to apply excessive, inappropriate pressure to the point that patient comfort and safety is compromised or
there is a potential for bodily harm, the student may be dismissed from the program.

**Incidental Findings during Student or Volunteer Sonograms**

Program and non-program models and volunteers are the cornerstone of ultrasound training as it provides the essential skills needed for the student to become a competent, entry-level sonographer. In addition to practicing on each other, volunteers and models may improve student skills, offering different body habitus that mimics real-life clinical scenarios. Volunteers and models must sign consent prior to being scanned. In the event of discovering incidental pathologic findings, the finding will be documented and the DMS faculty member will inform the volunteer as well as the Program Director. The examinations completed in the educational setting are not “diagnostic”, therefore, the medical director for the program will be notified of incidental findings and the physician will provide guidance for follow up and diagnostic testing.

**Clinical & Course Success**

To remain in the DMS program, students must meet academic requirements, must maintain patient safety, and must behavior in a professional manner in the classroom, laboratory, and clinical environment.

Isolated performance deficiencies or patterns of deficiency include the performance of undesirable academic, clinical, or professional behavior(s) as identified by faculty or clinical instructor. Examples include, but are not limited to, tardiness, disruptive behavior, safety issues, skill deficiency, or poor academic performance on a quiz/exam. The student will be given written documentation of the identified deficiency and criteria describing the methods to correct the deficiency, as well as future expectations. Failure to demonstrate satisfactory improvement will result in disciplinary action.

In the clinical or laboratory setting, a student who demonstrates unsafe behavior(s) which may endanger self or others may be dismissed and failed in the clinical and/or laboratory course
regardless of the course theory grade. This student will not be permitted to return to the clinical setting for the remainder of the semester and would receive a failing grade for the course regardless of the theory grade.

**Performance Improvement Plans**

When a performance deficiency is identified, a conference with the student and the program faculty/administrator will be arranged to develop a corrective action plan. Written documentation, in the form of a Performance Improvement Plan, will be provided to the student and a copy will be maintained in the student file.

In the event of a course failure, the student has the right to use the College Grade Appeal Process. Students may also utilize College Grievance Procedures. The academic policies can be accessed online at [http://www.cotc.edu/Academics/Documents/2015_2016_Acad_Policies.pdf](http://www.cotc.edu/Academics/Documents/2015_2016_Acad_Policies.pdf)
Section III

Clinical Success
Essential Abilities for Clinical Success

The DMS Faculty has specified essential abilities they believe are critical to the success of students in the Sonography program. Students must demonstrate these essential abilities to succeed in their clinical rotations.

**Essential judgment skills to include:** the ability to identify, assess, and comprehend conditions surrounding patient situations for the purpose of problem solving and coming to appropriate conclusions and/or courses of action.

**Essential neurological functions to include:** the ability to use the senses of seeing, hearing, touch, and smell to make correct judgments regarding patient conditions for the purpose of demonstrating competence in the practice of Sonography and patient care. Behaviors that demonstrate essential neurological functions include, but are not limited to observation, listening, understanding relationships, writing, and psychomotor abilities.

**Essential communication skills to include:** the ability to communicate effectively with fellow students, faculty, patients, and all members of the health care team. Skills include verbal, written, and non-verbal abilities consistent with effective communication.

**Essential emotional coping skills to include:** the ability to demonstrate the mental health necessary to safely engage in the practice of Sonography as determined by professional standards of practice.

**Essential intellectual/conceptual skills to include:** the ability to measure, calculate, analyze, synthesize, and evaluate to engage competently in the safe practice of Sonography.

**Other essential behavioral attributes to include:** The student must demonstrate responsibility and accountability for actions as a student in the DMS program and as a developing professional.

Students may be dismissed from the program if the faculty determines the student is unable to meet these essential abilities even if reasonable accommodations are made.

Clinical Goals

Sonography students at Central Ohio Technical College will attend the multiple semesters of clinical experience in order to:

1.0 Acquire proficiency in a wide variety of diagnostic sonography procedures by applying classroom theory to the actual practice of technical skills on specified levels of competency.

2.0 Develop and practice professional work habits and appropriate interpersonal relationships with patients and other members of the health care team. Failure to meet clinical goals will result in disciplinary action up to and including dismissal from the program.
Pre-Practicum / Pre-Clinical Performance Evaluation

Prior to initial clinical placement, near the end of the second scan lab course, all students must undergo a pre-practicum / pre-clinical performance evaluation with the clinical coordinator and the program director. This serves as a counseling and coaching opportunity to facilitate clinical success.

Clinical Objectives

The following are the recommended list of clinical objectives per semester. These objectives have been established in conjunction with the classroom lecture and laboratory objectives. Students are strongly encouraged to obtain competencies early, if qualified, since waiting until the end of the semester may add difficulty.

Summer Session Clinical Rotation

1. Summer Clinical: Principles of Clinical=One clinical rotation

   This clinical rotation is an introductory experience to the clinical setting in which students have an opportunity to observe and practice techniques related to sonographic imaging and patient care. Students will function under the close supervision of qualified sonographers in hospitals and other health related facilities. Students will gain experience in the following:

   a. Evaluate the patient requisition for sonographic examinations.
   b. Prepare the sonography facility for patient examinations and safety.
   c. Establish a patient/sonographer relationship with various types of patients.
      d. Demonstrate medical aseptic techniques at all times when in the clinical setting.
      e. Practice safe body mechanics when moving patients in the ultrasound department.
   f. Demonstrate the ability to perform basic film processing skills.
   g. Develop reception and filing skills needed in the ultrasound department.
   h. Identify the various components of the ultrasound machine.
   i. Select factors necessary for a routine examination.
   j. Operate the basic controls for the ultrasound machine.
   k. Identify various characteristics of the transducer.
   l. Demonstrate proper orientation of the transducer while scanning.
Fall Semester Clinical Rotation

1. **Fall Clinical**—Two clinical rotations:
   Given the standard sonography room with basic equipment, the student should be able to perform the following tasks with no less than 80% accuracy:
   
   a. Identify the various components of the ultrasound machine.
   b. Select factors necessary for a routine examination.
   c. Operate the basic controls for the ultrasound machine.
   d. Identify various characteristics of the transducer.
   e. Demonstrate proper orientation of the transducer while scanning.

2. Given a routine procedure, the student should be able to complete the following tasks with no less than 80% accuracy:
   
   a. Read and extract valuable information from the patient's chart.
   b. Assist patient to the examination area.
   c. Transfer patient to exam table and properly drape patient.
   d. Enter patient information in ultrasound machine to begin exam.
   e. Identify normal anatomy on the screen.
   f. Show initiative in scanning.

3. Given a patient and a requisition for an ultrasound examination, the student may choose to attempt a practice exam. However, at this time in the clinical experience, the student is expected to perform at the introductory level.

4. Given a requisition for an ultrasound examination, the student should be able to detail the steps necessary for the requisition to be appropriately processed through the department with no less than 80% accuracy.

5. Given a completed ultrasound examination, the student should be able to route the images appropriately with no less than 80% accuracy.

6. The student should be familiar with film processing and/or recording with no less than 100% accuracy.

7. The student should be able to locate specific supplies for the ultrasound area with no less than 80% accuracy.

8. Given the term "emergency, code, or crash cart" the student should be able to immediately locate the nearest cart in the department.

9. The student should know the emergency code telephone number for the institution with no less than 100% accuracy.
10. Given a patient under isolation precautions, the student should interact appropriately and exercise the necessary precautions with no less than 100% accuracy.

Spring Semester Clinical Rotation

1. Spring Clinical = Two clinical rotations:
The student is expected to continue to refine those skills defined in previous clinical objectives. By completion of this clinical experience, the student is expected to have completed any objectives and all required competencies. Requirements for successful completion of the entire clinical experience are outlined in the competency section of this manual.

2. Given a patient and a requisition, the student should be able to complete the following with no less than 80% accuracy:
   a. Identify patient
   b. Check for proper chart
   c. Note pertinent laboratory values
   d. Note patient history
   e. Prep the patient and explain exam
   f. Follow examination protocol in scanning
   g. Process images
   h. Present exam to physician with staff sonographer

3. Given a patient and a requisition for an ultrasound exam, the student should be able to attempt to perform procedures whenever possible. The student may attempt practice exams and competencies in completing requirements as outlined in the competency section of this manual.

Clinical Assignments

Students enrolled in the Central Ohio Technical College Diagnostic Medical Sonography Program are scheduled and rotated through the various clinical affiliations by the program faculty in consultation and agreement with the clinical affiliates. Assignments are made based on student clinical needs and site availability. While student drive to the clinical site is a concern, the student’s drive time is not a factor in the decision. Distance to clinical facilities is based on the distance to the facility from COTC Newark Campus, travel to some clinical facilities may be up to 1 ½ hours one way. Special requests will not be accepted. Students are assigned during 1st shift hours primarily; however, 2nd shift clinical rotations may be available or assigned.
Travel Expenses

Travel to the clinical education center is the responsibility of each student. A student may not have the opportunity to rotate through the closest facility. Students must realize the potential exists for extended travel to/from clinical sites (up to 1 and a half hours one way) simply due to the number of students selected by the program. Parking fees and/or facility fees may be associated with clinical assignments. Parking fees and facility fees are the responsibility of each student.

Clinical Orientations

Many facilities require students to complete a mandatory orientation prior to the clinical rotation. Students are required to comply with orientation processes for each facility as directed by the Clinical Coordinator. While some facilities require only paperwork orientation, other facilities required computer-based orientation or face-to-face orientation sessions. Be advised that students may be asked to complete their orientation prior to their first day of the clinical rotation, which may be during an academic break. Arrangements will be made for students who are unable to complete their orientations during academic breaks.

Lunches/Breaks

Students may purchase meals in the facility cafeteria at employee rates. To receive this benefit, uniforms with appropriate name tags must be worn. Lunch schedules will be assigned at the discretion of the clinical supervisor. Students will be given a one-half hour lunch break.

Health Insurance

Each student is responsible for any needed emergency care, medical supervision of chronic conditions, and costs involved. Neither Central Ohio Technical College nor the clinical affiliates assume responsibility for medical expenses that may be charged to you for incidents occurring during your clinical experience. Therefore, you are urged to purchase personal health insurance. If you already have a policy, check the details of the coverage. If an injury occurs while the student is participating in clinical education, the emergency room facilities will be made available to him/her. However, the student will be billed for services rendered.
Malpractice Insurance
Due to direct patient contact, it is mandatory that students have professional liability insurance. This coverage is arranged by the college, currently at no cost to the student.

Communicable Diseases
Sonography is a health care field and occasional contact with patients having communicable disease is likely. Students are expected to become knowledgeable of infection control procedures and take appropriate precautions and follow recommended steps. Students may at any time and for any procedure or duty, elect to wear disposable gloves. This is especially recommended if the student has exudative lesions or weeping dermatitis. Gloves must be changed between each patient and hands washed.

Students exposed to a known case of an infectious disease through direct contact of infective serum or plasma by: needle stick, cuts or abrasions, or mucous membrane exposure; should be evaluated serologically as soon as possible. The Center for Disease Control recommends if the source patient is negative there is no need for follow up. If the source patient is positive or unknown then repeat tests should be conducted in 6 weeks, 3 months, 6 months, and 12 months following exposure. The Student will follow the protocol recommended by the clinical facility. Neither the college nor the clinical affiliate assumes responsibility for the cost of the testing procedures. Students are expected to contact their personal physician.

Any student who suspects or who has been exposed to any communicable disease must notify the clinical instructor and Program Director immediately. An incident report should be completed and submitted to the Program Director. Appropriate safety and health measures will then be taken for all persons involved

Occurrence Reporting
An occurrence is a variance in events not consistent with desired operation or care of a patient. All occurrences/incidents which occur during clinical assignment resulting in patient, hospital personnel or personal injury and/or damage to equipment must be reported immediately to the clinical instructor and/or Program Director. In addition, a hospital occurrence/incident report
must be filed with program and hospital officials. Students are responsible for complying with all safety procedures. Incidents will be reviewed and appropriate action will be determined by program faculty.

**Attendance**

Diagnostic Medical Sonography is an applied science, and clinical education provides an opportunity to become proficient. The faculty believes that all scheduled learning activities, both class and clinical, are essential. It is unacceptable to be absent from DMS classes and/or clinicals.

Attendance at all class/course sessions is expected in order to promote success. Students who miss class for any reason are responsible to get materials, information and/or alternative assignments. Therefore, Central Ohio Technical College supports the following attendance policy.

- Students will attend all clinical assignments as scheduled by the Clinical Coordinator in cooperation with the affiliate clinical instructor.
- Each student will have a time sheet provided for documentation of clinical attendance. The student is responsible for maintaining an accurate record. Falsification of time sheets will be dealt with in accordance to the "Code of Student Conduct" as indicated in the student handbook available on the COTC website. The appropriate hours spent at the clinical site must be entered on the time sheet by the student. The clinical instructor at the site should sign the time sheet at the end of each week to verify the student's attendance. These sheets will be checked periodically by the program faculty during routine clinical visits. The attendance sheet must be turned in to the Clinical Coordinator at the end of each semester to receive a passing grade. A clinical day is defined as an 8 ½ day which includes a ½ hour lunch break.
- If unavoidable circumstances result in tardiness or absence, students are required to notify the clinical facility via phone at the affiliate and the program faculty as soon as possible. Notifying the DMS faculty of an absence via text messaging is not acceptable. All tardiness and absenteeism must be made up prior to the end of the semester for the
student to be considered for a passing grade. Failure to notify faculty of an absence will result in a 5% reduction in the overall grade.

- An absentee form must be completed and submitted to the clinical coordinator the day you return to campus.

- Due to the limited availability of clinical sites for make-up rotations, a limited number of absences per semester are permitted. During Clinical Semesters, only (2) two absences are permitted. All absences must be made up by the end of the semester. COTC holidays or breaks, when the campus is closed, are not permitted to be used as make up days or clinical hours. For each additional day absent after 2 days, a 5% reduction in overall grade will be applied.

- Campus closures: If Newark COTC/OSU campus is closed due to severe weather, such as snow or ice, students are excused from clinical hours. However, if Newark COTC/OSU campus is closed due to a power outage, sewer/water problem, gas leak, etc. students are not excused from clinical hours.

- Habitual tardiness and/or absenteeism may result in dismissal from the Diagnostic Medical Sonography Program. Absences of three or more consecutive days for reasons of illness will require a physician's statement regarding student capability to resume clinical assignment. If a student has experienced a health alteration which has the potential to negatively impact the student’s clinical performance, the faculty may request a medical release from the student’s physician verifying they may perform without limitations.

**Exam Log Sheets**

Each student is required to complete exam log sheets recording the clinical examinations observed or performed. It is the student's responsibility to maintain an accurate and current record. Log sheets will be distributed to students at the beginning of each semester. Additional log forms are available from the Clinical Coordinator. All completed forms will be submitted to the Clinical Coordinator at the end of each clinical rotation.
Clinical Evaluation

Each student will be evaluated at least twice per semester by the clinical instructor at the clinical education site. Clinical evaluations will account for a significant portion of your clinical grade. A student must receive a grade of 75% or higher on the clinical evaluation(s) each semester to continue in the DMS Program. It is the student’s responsibility to familiarize themselves with the criteria in each evaluation. The evaluation is submitted to the Clinical Coordinator. It is the student's responsibility to be sure this has been completed and submitted on time

Clinical Grading

The student must maintain a grade of "C" or better in all clinical education courses. A grade of less than "C" will prevent the student from continuing in the DMS Program.

The final grade awarded to the student will be determined by the grades earned on various clinical assignments including film critiques, competencies achieved and clinical instructor evaluations***.

*** Clinical evaluation grades must be 75% or greater in order to achieve a passing grade for the clinical course. Students receiving less than 75% on a clinical evaluation will be dismissed from the DMS Program.

Additional criteria for a passing grade include:

1. Attendance of all regularly scheduled clinical assignments with any missed hours made up as arranged by the student, program faculty, and clinical instructor.

2. Completion of the minimum number of required clinical competencies for a given semester.

3. Maintain and submit the daily log sheets indicating the number and types of exams in which you have observed or performed.

4. Submit the Clinical Instructor Evaluation(s) of student performance to the Clinical Coordinator.

5. Participation in the clinical coursework including, but not limited to, case presentations, discussions, and meetings.

A non-passing grade may result from the following, including, but not limited to:

1. Failing to attend all the regularly scheduled clinical assignments and/or make up any missed clinical hours.
2. Failing to complete the minimum number of competencies for a given semester.

3. Failing to maintain and hand in the weekly log sheets listing the number and types of exams you have observed or performed.

4. **Receiving more than two reports relating to the same type of conduct and/or personal appearance.**

5. Failing to adhere to published college and/or program policies.

6. **Displaying unprofessional conduct.** Students are expected to demonstrate professional behaviors at all times in the clinical setting. In a clinical or laboratory setting, a student who demonstrates unsafe behavior(s) which may endanger self or others may be dismissed and failed in the clinical or laboratory course regardless of the course theory grade.

7. Performing practices which are unsafe to patients, personnel, other students, or self. These habits must be documented by program faculty and sonographers. When this professional judgment is made, the student involved will be removed from the patient contact area and counseled relative to future options.

8. Failing to submit the Clinical Instructor Evaluation(s) of student performance to the DMS faculty.

Students are reminded that in order to advance within the Central Ohio Technical College DMS Program, a grade of "C" or better must be maintained in all sonography courses.

**General Clinical Policies**

1. Students may bring textbooks and study material to the assigned clinical facility, however, study material must be stored such that the normal operation of the department is not interrupted. Students may not study when examinations are scheduled or available to observe in your assigned areas.

2. Central Ohio Technical College contracts with area sonography departments to provide clinical education opportunities for students. Students enrolled in the program shall comply with all policies and procedures of each affiliate.

3. Students are expected to demonstrate interest in keeping the department clean and efficient by reporting any deterioration, breakages, malfunction of equipment or depletion of supplies that come to your attention. This will facilitate prompt repair and re-stocking.

5. Whenever situations arise in which students are unable to handle or have questions/concerns, seek advice before proceeding further.
Section IV
Professional Conduct
Uniforms and Appearance

The personal appearance and demeanor of the sonography students at Central Ohio Technical College reflect both the college and professional standards and are indicative of the student's interest and pride in their profession.

While on clinical assignment your attire will be clean and neatly presented. Your uniform will consist of ceil blue or white scrubs, a lab coat and primarily white shoes.

Any student reporting to the clinical assignment in an improper uniform or attire, or in soiled or untidy attire will be sent home by the clinical instructor/supervisor and missed time must be made up. Remember, if you want to be treated as a professional, look professional. When in the clinical areas, all students shall observe the following guidelines:

1. All students will wear a name badge and COTC patch (to be purchased by the student).
2. Appropriate footwear, predominantly white, shall be worn, no bare legs.
3. Hair will be clean and neat at all times. Unnatural, bold hair colors are not permitted (pink, purple, blue etc.).
4. If you choose to wear makeup, it must be discreetly applied.
5. Students must maintain personal hygiene. Perfumes and aftershave lotions will be used in moderation. There should be no discernible smoke odor. Clinical facilities have the right to dismiss students presenting with an offensive odor.
6. Students are permitted to wear wedding, engagement or class rings, earrings and watches. No costume or oversized jewelry will be permitted. No visible body piercing other than earrings will be permitted.
7. No artificial nails or long natural nails will be permitted. It is recommended that natural nails be no longer than ¼ inch past the fingertip.
8. Tattoos should be covered whenever possible. If tattoos cannot be covered, clinical facilities have the right to dismiss students presenting with visible tattoos.
9. **Religious attire:** The DMS Program will grant student’s reasonable requests for religious
accommodation where doing so does not conflict with reasonably necessary Program goals. Upon request, the DMS Program will make reasonable efforts to accommodate students’ attire that is related to their sincerely held religious beliefs. The student is obligated to make DMS Administration aware of the need for religious accommodation in advance of the need for the accommodation. The DMS Program may limit religious practices that put public safety, health, or the human rights of others at risk.

a. Students should be aware that clinical agencies may have their own dress code requirements with which we are obligated to comply. Failure to comply with agency policies may result in the student being unable to complete course requirements.
b. Students who wear a head scarf (such as a hijab) are asked to limit the scarf to a single color of black, white, or blue in the Laboratory or clinical setting. Sequins or other items that are subject to detachment are prohibited.
c. Facial veils are prohibited in the Laboratory or clinical setting.

10. Prior to initial clinical placement, near the end of the second scan lab course, students will be required to report to class in uniforms where clinical appearance will be evaluated and critiqued. Students will not be assigned to a clinical rotation until they have met this requirement.

**Patient Identification**

Always check identification bands on all in-house and emergency patients to assure proper identification. This should be done at the following times: when transporting a patient from his/her room to the department; when bringing a patient into the sonography room; and before the examination begins.

When summoning an outpatient from a waiting or dressing area, ask them to state their name. Do not ask "are you Mrs. Smith?" Too often patients will answer yes, thinking they will get finished faster. Always correlate both first and last names of individuals with the examination order.

**Patient Confidentiality**

All hospital and patient records are confidential in nature. Do not discuss a patient, his illness or his private affairs with anyone, publicly or privately. Students are expected to maintain confidentiality in a professional manner. Breech of this confidentiality will subject the student to dismissal from the program.

**Patient Modesty**

The modesty of the patient must be respected at all times. Patients should receive ample gowns,
robes, blankets to cover their body and protect their privacy.

**Patient Bill of Rights**

1. The patient has the right to considerate and respectful care.

2. The patient has the right to obtain from his physician complete current information concerning his diagnosis, treatment, and prognosis in terms that patient can be reasonably expected to understand. When it is not medically advisable to give such information to the patient, the information should be made available to an appropriate person in his behalf. He has the right to know, by name, the physician responsible for his care.

3. The patient has the right to receive from his physician information necessary to give informed consent prior to the start of any procedure and/or treatment. Except in emergencies, such information for informed consent should include, but not necessarily be limited to, the specific procedure and/or treatment, the medically significant risks involved, and the probable duration of incapacitation. Where medically significant alternatives for care or treatment exist, or when the patient requests information concerning medical alternatives, the patient has the right to such information. The patient also has the right to know the name of the person responsible for the procedures and/or treatment.

4. The patient has the right to refuse treatment to the extent permitted by law and to be informed of the medical consequences of his action.

5. The patient has the right to every consideration of his privacy concerning his own medical care program. Case discussion, consultation, examination, and treatment are confidential and should be conducted discreetly. Those not directly involved in his care must have the permission of the patient to be present.

6. The patient has the right to expect that all communications and records pertaining to his care should be treated as confidential.

7. The patient has the right to expect that within its capacity, a hospital must make reasonable response to the request of a patient for services. The hospital must provide evaluation, service, and/or referral as indicated by the urgency of the case. When medically permissible, a patient may be transferred to another facility only after he has received complete information and explanation concerning the needs for and alternatives to such a transfer. The institution to which the patient is to be transferred must first have accepted the patient for treatment.

8. The patient has the right to obtain information as to any relationship of his hospital to other health care and educational institutions insofar as his care is concerned. The patient has the right to obtain information as to the existence of any professional relationships among individuals, by name, who are treating him.
9. The patient has the right to be advised if the hospital proposes to engage in or perform human experimentation affecting his care or treatment. The patient has the right to refuse to participate in such research projects.

10. The patient has the right to expect reasonable continuity of care. He has the right to know in advance what appointment times and physicians are available and where. The patient has the right to expect that the hospital will provide a mechanism whereby he is informed by his physician or a delegate of the physician of the patient's continuing health care requirements following discharge.

11. The patient has the right to examine and receive an explanation of his bill, regardless of source of payment.

12. The patient has the right to know what hospital rules and regulations apply to his conduct as a patient.

**Unprofessional Conduct**

Unprofessional conduct impacts the academic performance of students and can have a direct impact on patient safety.

The Diagnostic Medical Sonography Program faculty of Central Ohio Technical College considers the following to be examples of unprofessional conduct. This list is not all-inclusive.

Students exhibiting unprofessional conduct will be dismissed from the Diagnostic Medical Sonography program.

1. Possessing drugs or alcohol, or engaging in their use while enrolled in the DMS program, on clinical assignment or on COTC campus.

2. Sleeping on clinical assignment.

3. Engaging in theft of any article from the clinical affiliation or DMS lab.

4. Engaging in any immoral conduct or sexual misconduct while on clinical assignment or on COTC campus.

5. Habitual or excessive tardiness and/or absenteeism from clinical assignment.


7. Falsification of attendance records of any kind. Falsification of COTC admission
documents or program application will result in dismissal from the program.

8. Refusing to accept assignments by the clinical instructor commensurate with student capabilities during clinical rotation.

9. Smoking in areas where it is prohibited while on clinical assignment.

10. Eating in areas not specifically designated for that purpose at the clinical facility.

11. Loitering in the sonography department at times not specified for clinical assignment.

12. Acceptance of any type of gratuity from a patient or a patient's family while on clinical assignment.

13. Receiving competency evaluation while working as an employee.

14. Scheduling employment concurrent with student clinical experience.

15. Using a cell phone (including texting) during patient exams, while performing patient exams or in an area at the clinical facility where cell phone use is prohibited.

16. **Any** student behavioral/technical issues that results in the clinical site requesting student removal. If a clinical facility requests a student be removed, the student will be dismissed from the program.

17. Unprofessional communication or conduct with a patient or in the presence of patient, with a clinical educator, or clinical site staff member while on clinical assignment.

18. Unprofessional communication or conduct with a student, faculty member, instructor, or staff member in a COTC classroom or COTC lab.

19. Any communication on social networks or public forum divulging patient information, detailed clinical interactions or public expressions of malcontent with a specified clinical facility.

20. Any communication on social networks or on a public forum expressing malcontent with the DMS Program, Program faculty or DMS student.

21. Insubordinate behavior or actions directed toward COTC faculty, clinical instructors or clinical facility staff members.

22. Knowingly providing or receiving information during examinations such as course examinations and candidacy examinations; or the possession and/or use of unauthorized
materials during those examinations. Academic misconduct may result in dismissal from the college, as well as the DMS program.

23. Receiving two or more reports relating to the same type of sub-standard behavior, conduct, communication and/or personal appearance/hygiene issues for a given clinical rotation.

24. Failure to notify clinical staff prior to leaving the assigned area/clinical facility or leaving the assigned clinical area/clinical facility without permission.

** Students dismissed from the DMS program due to unprofessional conduct are not eligible for re-admission / re-application into the DMS program.
I, ________________________________ have read the
(Print Name Above)
Diagnostic Medical Sonography Unprofessional Conduct Guidelines and I have been
given the opportunity to ask any and all questions relating to conduct requirements.

I hereby agree to follow the policies as outlined in the DMS Handbook.

________________________________________________________________________
(Signature) (Date)
Section V
Clinical Competency System
Three-Tiered Competency System

As a requirement through the JRC-DMS in accrediting Sonography programs, a competency-based clinical system must be maintained in order for students to become proficient in performing sonographic procedures. The DMS Program's three-level or tiered competency system was introduced to aid in tracking student progress and attempt to standardize competency achievement. Students will be attaining competency at advancing levels throughout the clinical experience. This type of a tiered competency system allows students to develop confidence and skill advancement.

Once achieving a basic knowledge of an examination protocol and basic scanning skills, the student may attempt a Level I Practice Examination. Successful completion of a Level I Practice Exam requires the student to perform 50% of the examination. It also requires the student to produce diagnostic quality imaging for that portion of the exam.

The student may attempt a Level II Practice Exam when successfully completing 75% of the examination. Again, the imaging will need to meet the diagnostic quality criteria for successful completion. A specific number of Level I and Level II Practice exams are required for each type of sonographic procedure. A student may not advance to Level II until all Level I practice exams are completed for that procedure.

Once all practice exams have been achieved the student may attempt a clinical competency. The Clinical Competency requires the student to perform the entire procedure from beginning to end with little to no assistance.

A student may challenge a clinical competency at any time. The student may wish (and is encouraged) to obtain more than the minimum number of competencies required per semester.

Removal of Competency

In the event that a student is observed to not be competent in a procedure that he/she had previously performed satisfactorily as a competency, the competency in question must be repeated after proper documentation is provided to the program faculty. A grade for the repeated competency shall be recorded, but shall not count toward the student's minimum number of
competencies for the semester. The following procedure is to be followed when a clinical instructor or program faculty deems a student to be performing in an incompetent manner on a procedure in which the student has previously received a satisfactory clinical competency rating.

1. The observer must document in writing those tasks in the sonographic examination which were deemed performed incompetently by the student in question.

2. The observer must present the documentation to the student in a counseling session and allow the student to read and sign the document. Such a signature only indicates that the student is aware of the reasons for the proposed change in competency status of the procedure.

3. The observer shall forward the document to the Clinical Coordinator for consideration.

4. The Clinical Coordinator shall discuss the issue with the observer and the student.

5. After consultation with the Program Director and other program faculty, the Clinical Coordinator shall make a decision and write the recommendation to the student in question and the observer.

6. Should the student be deemed acting in an incompetent manner, the student shall have to repeat the procedure in accordance with the established guidelines in the Clinical Handbook.

7. The DMS faculty’s decision shall be final, and all must abide by the decision as all parties had an opportunity to have address the question.

**Competency and Practice Exam Log**

The Competency and Practice Exam Log Form outlines the number of Level I and Level II practice exams needed for each procedure prior to obtaining the clinical competency. The log form is kept by the student and exams recorded by the student. All completed practice exams and competency forms are to be submitted to the Clinical Coordinator where a master log form is also kept for each student. Documentation must be submitted for each practice exam and clinical competency to the Clinical Coordinator in order for the requirement to be recognized. If a form is lost or misplaced and does not exist in the student's clinical file for any reason, the exam must be repeated in order for the requirement to be met.
Diagnostic Medical Sonography Program
GENERAL Major
Competency and Practice Exams

(A minimum of 19 competencies is required for program completion)

Required GENERAL Competencies:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Level I (50%)</th>
<th>Level II (75%)</th>
<th>Comp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallbladder / Biliary</td>
<td></td>
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<tr>
<td>BP (Auscultation)</td>
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<tr>
<td>Liver</td>
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<tr>
<td>Pancreas</td>
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<tr>
<td>Kidneys</td>
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<tr>
<td>Bladder</td>
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<tr>
<td>Pleural Space</td>
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<tr>
<td>Sonographic Guided Procedure</td>
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<tr>
<td>Thyroid</td>
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<tr>
<td>Scrotum</td>
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<tr>
<td>Aorta / IVC</td>
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<tr>
<td>Spleen</td>
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</tbody>
</table>

Clinical or Lab/Simulated Setting:

<table>
<thead>
<tr>
<th>Vascular Area</th>
<th>Level I (50%)</th>
<th>Level II (75%)</th>
<th>Comp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdominal Vasc: Renal</td>
<td></td>
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<tr>
<td>Abdominal Vasc: Mesenteric</td>
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<tr>
<td>Abdominal Vasc: Hepatoportal</td>
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</tbody>
</table>

OB/GYN Competencies:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Level I (50%)</th>
<th>Level II (75%)</th>
<th>Comp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transabdominal Pelvis (non-gravid)</td>
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<tr>
<td>Transvaginal Pelvis (non-gravid)</td>
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<tr>
<td>1st Trimester-Complete</td>
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</tr>
<tr>
<td>Level I 2nd/3rd Trimester: Fundamentals</td>
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</tbody>
</table>

Additional Optional Competencies:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Level I (50%)</th>
<th>Level II (75%)</th>
<th>Comp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Level II 2nd/3rd Trimester: Complete</td>
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</tbody>
</table>
**Diagnostic Medical Sonography Program**  
**Cardiovascular Major**  
**Competency and Practice Exams**

(A minimum of 25 competencies is required for program completion)

### Required VASCULAR Competencies:

<table>
<thead>
<tr>
<th></th>
<th>Level I (50%)</th>
<th>Level II (75%)</th>
<th>Comp</th>
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</thead>
<tbody>
<tr>
<td><strong>BP (Auscultation)</strong></td>
<td></td>
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<tr>
<td><strong>Carotid Duplex</strong></td>
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<tr>
<td><strong>Lower Extremity Venous Duplex</strong></td>
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<tr>
<td><strong>ABI</strong></td>
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<tr>
<td><strong>Aortoiliac Duplex</strong></td>
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<tr>
<td><strong>Upper Extremity Arterial Duplex</strong></td>
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<tr>
<td><strong>Lower Extremity Arterial Duplex</strong></td>
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<tr>
<td><strong>Upper Extremity Venous Duplex</strong></td>
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</table>

**Clinical or Lab/Simulated Setting:**

<table>
<thead>
<tr>
<th></th>
<th>Level I (50%)</th>
<th>Level II (75%)</th>
<th>Comp</th>
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</thead>
<tbody>
<tr>
<td><strong>Transcranial Doppler / Vasospasm</strong></td>
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<tr>
<td><strong>Upper Segmentals / Palmar</strong></td>
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<tr>
<td><strong>Lower Segmentals</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Visceral Vascular: Renal</strong></td>
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<tr>
<td><strong>Visceral Vascular: Mesenteric</strong></td>
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<tr>
<td><strong>Visceral Vascular: Hepatoportal</strong></td>
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</tbody>
</table>

### Required CARDIAC Competencies:

<table>
<thead>
<tr>
<th></th>
<th>Level I (50%)</th>
<th>Level II (75%)</th>
<th>Comp</th>
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</thead>
<tbody>
<tr>
<td><strong>Complete Adult Echo</strong></td>
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</table>

- **Systolic / Diastolic dysfunction / Coronary Disease**
- **Aortic Valve pathology**
- **Mitral Valve pathology**
- **Right Heart pathology / Cardiomyopathy**
- **Pericardial pathology**
- **Prosthetic Valve / Cardioembolic source Eval**
- **Contrast / Agitated Saline**
- **Transesophageal**
- **Stress Echo**
Competency Requirements

A minimum number of competencies must be satisfactorily completed each semester to qualify a student to receive a passing grade for the clinical course. The number of competencies required per semester for the general major students and the cardiovascular students will vary.

In addition to competency requirements, students must also fulfill program completion clinical requirements in order to be considered eligible for graduation. Program completion requirements include the following:

- **General Major DMS Students:**

  A total of nineteen (19) competencies must be satisfactorily completed prior to graduation.

  General students who obtain the required 19 competencies will receive the clinical verification to take the RDMS (AB) and (OB) ARDMS specialty examinations.

- **Cardiovascular Major DMS Students:**

  A total of twenty four (24) competencies must be satisfactorily completed prior to graduation.

  Cardiovascular students who obtain the required competencies will receive the clinical verification to take the RDCS & RVT ARDMS specialty examinations and the RCS & RVS CCI specialty examinations.
General Major & Cardiovascular Major DMS Students Dedicated Specialty Clinical

Selection Process

- Throughout the program, students may apply to be chosen for a dedicated obstetrical, pediatric, or breast clinical internship with additional, specialized training in maternal-fetal medicine & 2nd & 3rd trimester obstetrical, breast, pediatric sonography or pediatric echocardiography. The criteria for selection is as follows:

  Specialty Clinical Rotation:
  o The selection criteria and process will be based on overall clinical performance during the previous clinical rotations and the total number of clinical competencies & practice examinations.
  o The number of students selected is based solely on clinical site availability, so the number of students selected will vary and is not guaranteed.
  o If the number of eligible students applying exceeds the number of available clinical sites, selection will be based on PROGRAM GPA, with students with the highest GPA seated first.
I, ______________________________________ have read the Diagnostic Medical Sonography Student Handbook procedures & policies and I have been given the opportunity to ask any and all questions relating to conduct requirements.

I hereby agree to follow the policies as outlined in the DMS Handbook.

________________________________________________
(Signature)                                          (Date)
Final Note

Central Ohio Technical College reserves the right to make changes without notice in the sonography curriculum, scheduling, and policies in order to preserve the high standards for approval and accreditation of the Diagnostic Medical Sonography Program.