



Determination

Diagnostic
Medical
Sonography
Student
Handbook
2022-2024



Diagnostic Medical Sonography Student Handbook Table of Contents

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(Also Refer to College Catalog online at Gwinnetttech.edu)

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Fall 2022

Dear Diagnostic Medical Sonography Student,

Welcome to the Gwinnett Technical College Diagnostic Medical Sonography Program where you will be instructed in one of the most exciting professions in healthcare! Sonography is a rapidly growing and evolving field with many specialties. Your education will be in the concentrations of Abdominal Sonography-Extended, Obstetrical-Gynecological and Breast Sonography. You will also learn basic Vascular Sonography and basic Musculoskeletal Sonography. You will earn an Associate Degree in Applied Science in Diagnostic Medical Sonography. GTC DMS students are required to take the registry examinations in Sonographic Principles and Instrumentation after your first semester as well as Abdominal and OB/GYN specialties during your final semester. All 3 are offered by the American Registry of Diagnostic Medical Sonographers (ARDMS). We are in the process of applying for accreditation to be awarded the Breast Concentration status, update forthcoming. Pending your program completion and passing vascular critical competencies, you may also qualify to take the Vascular Sonography specialty certification exam after graduation.

Congratulations on your selection into the Diagnostic Medical Sonography Program. Your career path choice comes with many important responsibilities.

1. Success in this program is not simply about being smart but more about a commitment and willingness to work hard. Many students who fail or who withdraw from this program were simply not willing, or unable to invest the required amount of time to study effectively or to practice scanning outside of regular class time. Faculty will be covering large volumes of material in a relatively short period of time. Additional research and study will be required outside the classroom depending on your grasping of the concept(s) or for projects. Extensive studying and preparation on your part is an essential component for an education in sonography. Development of competent imaging skills will require practice outside regular hours as well. So your successful completion of the GTC DMS program depends mostly upon your willingness and ability to invest enough time to adequately learn the material, % Effort = % Results. As stated, many times in the informational meetings, be prepared to spend most of your free time studying.
2. Sonography students must be committed to the profession. Being a sonographer can be challenging physically, mentally, and emotionally. One must be prepared to always perform to the best of his/her ability. Sonographers may go from a patient with a negative outcome to one of the happiest moments in a patient's life and must remain professional.
3. Sonography students must strive for excellence, not perfection. You will be part of a healthcare team. Patients are customers and when health care providers fail in our

performance, the patient suffers as well as the business. While our primary goal is to obtain high quality diagnostic images, remember the patient is a human being with fears, anxieties, and concerns. You will need to make them as emotionally and physically comfortable as possible before concentrating on acquiring the best diagnostic images possible.

4. One of the statements from the SDMS Code of Ethics and stated as one of our program outcomes is to "maintain continued competence through lifelong learning, which includes continuing education, acquisition of specialty specific credentials and re-credentialing." Sonography is an ever-changing field of science and requires continuing educational growth. New imaging techniques and advances in technology require constant learning and maybe additional training. All those who work in the healthcare field should be lifelong learners.

Congratulations again on your selection! We are excited to begin this journey with you. The DMS faculty is glad that you chose Gwinnett Technical College for your sonography education. We look forward to sharing our knowledge, experience, and enthusiasm for the field of sonography and life-long pursuit of learning. We are here for our students and make every effort to help them succeed. We promise to continue to support you as a graduate of this program.

Sincerely and Respectfully,

Your GTC DMS Faculty

Kim Strong

Program Director

Kara Caldwell

Clinical Coordinator

Cristina Migliore

Co-Clinical Coordinator

Jennifer Palacio

DMS Faculty

Dasar Daljousif

DMS Lab Assistant

SECTION I. GWINNETT TECHNICAL COLLEGE INFORMATION

1.1 Vision

Teach every individual; serve every business.

1.2 Mission & Purpose

Advance the knowledge of individuals to enrich lives and develop opportunities. Gwinnett Tech, a unit of the Technical College System of Georgia, is a public two-year college that serves the communities of Gwinnett and North Fulton by offering campus and distance learning for associate degrees, diplomas, and certificates in credit programs as well as for adult and continuing education training.

Values

What we have:

Integrity: We say what we mean, we treat people with respect, and we honor our promises.

Commitment: We are devoted to our job, and accountable to our students, our peers, and our leaders.

Excellence: We strive to excel in all we do.

What we provide:

Customer Focus: We believe that the students and businesses we serve are our customers and we strive to consistently meet or exceed their expectations.

Adaptability: We embrace diversity and are resilient in our goal to serve an all-inclusive audience.

Leadership: We recognize our duty to lead our students and serve our community.

Lifelong Learning: We believe education to be the paramount foundation for continuing success.

Innovation: We foster an environment that nurtures creativity and emerging technologies.

1.3 College Accreditation

Gwinnett Technical College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award the associate degree. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Gwinnett Technical College. This is the same accreditation shared by many other colleges and universities throughout the region, and it ensures that our programs and curriculum meet the quality standards that you and today's businesses demand.

1.4 Graduate Warranty

The Technical College System of Georgia has developed curriculum standards with the direct involvement of business and industry. These standards serve as the industry-validated specification for each occupational program. These standards allow Georgia's system of technical colleges, of which Gwinnett Technical College is one, to offer their business partners the following guarantee.

“If one of our graduates, who was educated under a standard program, and his/her employer agree that the employee is deficient in one or more competencies as defined in the standards, the technical college will retrain that employee at no instructional cost to employee or employer.”

This guarantee applies to any graduate of our technical college who is employed in the field of his/her training. It is in effect for a period of two years after graduation. For questions involving the guarantee, please contact the Academic Affairs Office at 770-962-7580, ext. 6299.

1.5 Admissions

See “Admission Procedures” section of the GTC Catalog, found under the “Academics” tab.
<http://www.gwinnettech.edu>

1.6 Advisement

While in the Diagnostic Medical Sonography Program, students are advised by the Program Director. The students should utilize DegreeWorks to access their advisement plan. *Although advisors assist students in academic planning, each student is responsible for meeting all program pre-requisite and graduation requirements.*

1.7 Counseling Services

Counseling at Gwinnett Technical College is a mental health resource to provide free, personal, and confidential therapeutic services in a supportive environment. The purpose is to help students acquire the resources, attitudes, abilities, and insights that will enable them to successfully complete their academic program of study. Counseling can help reduce stress by providing a safe place for students to talk about their concerns, identify resources, and develop the skills needed to deal more effectively with distress.

If you are interested in establishing counseling services, or to find out more information you may call our office at 678-226-6628. Please leave a message with your name and a contact number that we can reach you at if we are not available, and we will return call as soon as possible. You may also send a brief email with your name, student ID and contact number for appointment information to CounselingServices@GwinnettTech.edu. The Counseling Center is in Building 100 Room 609 on the Lawrenceville Campus.

1.8 Disability Services

Students who have a disability or have inquiries regarding the nondiscrimination policies are encouraged to notify Lisa Richardson, Section 504 and Title IX Coordinator (Lawrenceville campus, Building 100/Room 708) at 678-226-6691 or LRichardson@GwinnettTech.edu. Juan Wilson, (Alpharetta-North Fulton campus, Building A/Room 152), Coordinator, Support Services, 470-282-5453 or JWilson@GwinnettTech.edu.

Gwinnett Tech is committed to meeting the Information and Communication Technology (ICT) Standards and Guidelines stated in Section 508 and the technical standards. Please report any accessibility issues to your instructor or contact Lisa Richardson at 678-226-6691 or email her at LRichardson@GwinnettTech.edu.

Disability accommodations can be made for testing, extended time on timed tests/exams, recording of lectures, etc. Students must be registered with Disability Services and provide supporting documents to receive reasonable accommodations. Students registered with Disability Services are still expected to meet all course requirements and/or deadlines.

1.9 Discrimination and Sexual Harassment

The Technical College System of Georgia and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered

programs, programs financed by the federal government including any Workforce Innovation and Opportunity Act of Student Information 63 1998 (WIOA) Title I financed programs, educational programs and activities, including admissions, scholarships and loans, student life, and athletics. It also encompasses the recruitment and employment of personnel and contracting for goods and services.

The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Lisa Richardson, Title IX, Equity, and Section 504 Coordinator, 678-226-6691, lrichardson@gwinnettech.edu, Gwinnett Technical College, 5150 Sugarloaf Parkway, Lawrenceville, GA 30043-5702.

1.10 Use of Technology

- a. Damage and Destruction: Destruction of or harm to equipment, software, or data belonging to the technical college or to others is considered unacceptable usage. This may include altering, downloading, or installing software on technical college computers, tampering with computer hardware or software configuration, improper access to the technical college's network, and disconnection of technical college computers or devices.
- b. Electronic Devices: Unless otherwise permitted by technical college officials, the technical college prohibits use of electronic devices in classrooms, labs, and other instructional, event, or affiliated facilities on technical college premises. Such devices include, but are not limited to cell phones, walkie talkies, cameras, gaming devices, and other electronic devices, which may cause unnecessary disruption to the teaching/learning process on campus. The technical college also prohibits attaching personal electronic devices to college computers under any circumstances.
- c. Harassment: The technical college prohibits the use of computer technology to harass another student or technical college official with obscene, harassing, or intimidating messages, communications, jokes, or material.
- d. Unacceptable Use: The technical college prohibits the use of computing facilities to interfere with the work of another student, faculty member or technical college official. This includes the unauthorized use of another individual's identification and password. Gwinnett Technical College prohibits any additional violation to the college's Acceptable Computer and Internet Use Policy.

1.11 Financial Aid

Financial Aid

The Financial Aid Office follows the guidelines for Verification of Lawful Presence in the United States policy. For further information, please review Verification of Lawful Presence found within the General Admissions Procedures section of the catalog.

Gwinnett Tech Financial Aid Office offers federal, state, and institutional financial aid to eligible students to assist with the cost of attending school. Financial aid may take the form of:

1. Federal Financial Aid
 - a. Federal Pell Grant
 - b. Federal Supplemental Educational Opportunity Grant (SEOG)
 - c. Federal Work-Study (FWS)
 - d. Federal Subsidized and Unsubsidized Direct Stafford Loans
2. State Financial Aid
 - a. Helping Outstanding Pupils Educationally (HOPE)

- i. HOPE Grant (certificate/diploma programs only)
 - ii. Hope Scholarship (associate degree programs only)
 - iii. General Educational Development (GED) Voucher
 - b. Zell Miller Grant (certificate/diploma programs only)
 - c. Zell Miller Scholarship
 - d. Move on When Ready (MOWR)
 - e. Helping Educate Reservist and their Offspring (HERO) Scholarship
 - f. Georgia Access Student Loans (SAL/SALT)
 - g. Strategic Workforce Investment Scholarships (SWIG)
3. Institutional and Private Scholarships
 4. Veterans Educational Benefits
 5. Workforce Innovation and Opportunity Act WIOA

1.12 Student Complaint Policy

It is the policy of Gwinnett Technical College, a unit of the Technical College System of Georgia, to maintain a grievance process available to all staff and students that provides an open and meaningful forum for grievances, the resolution of grievances, and is subject to clear guidelines. This procedure does not address grievances related to the unlawful harassment, discrimination and/or retaliation for reporting harassment/discrimination against students. Those complaints are handled by the Unlawful Harassment and Discrimination of Students procedure that can be found in the college catalog.

The Student Complaint Policy is established to resolve difficulties or problems encountered in college-related activities. Complaints are taken seriously and therefore must be of a compelling, substantive, and verifiable nature. Complaints about a decision made by a member of the faculty or staff may only be filed by students who have been directly, adversely, and substantially affected by the decision. Repeated filings of the same complaint, filings of a frivolous nature, or capricious complaints made against school personnel and policies will be considered an abuse of the student complaint process and will be dismissed.

The Student Complaint Policy applies to matters that may include: classroom learning environment, course content, access to classes, student advisement, and quality of services to students. The policy also applies to matters concerning services provided by Student Affairs and Administrative Offices. Student Complaint forms should be sent to studentcomplaints@gwinnetttech.edu.

The following forms of complaints will be referred to the appropriate administrator:

- Academic Grade Appeals – Academic Affairs Office
- Student and Administrative Services (including but not limited to: admissions, financial aid, registrar, records, assessment, FERPA, etc.) – Vice President of Student Affairs
- Harassment, Sexual Harassment and Violence, Discrimination – Equity Coordinator (Coordinator of Special Populations)
- Student Code of Conduct Violations – Vice President Student Affairs

1.13 Appeals Procedures

See "Grade Appeals" section of the GTC Catalog. This process may be used for clinical grievances/appeals as well as academic appeals. <http://www.gwinnetttech.edu>

1.14 Health Services

As a non-resident school, Gwinnett Tech expects students to secure medical services through a private physician. In case of a serious accident or illness, Gwinnett Tech will refer a student to the nearest medical facility for emergency care. It is understood that the student, parent, or guardian will assume full responsibility for the cost of such emergency care at the hospital, including ambulance charges if, in the opinion of school officials, such service is necessary.

1.15 Insurance

Gwinnett Tech does not provide student medical insurance. Enrollment as a fulltime student includes a \$6.00 fee that provides student accident insurance. Student liability insurance is required for students enrolled in certain health and applied technology programs. In these instances, students will be notified regarding premiums and payment. The cost is \$15 annually and is added into your student fees. Kaiser offers an economical health insurance plan to students- kp.org/gabridge

1.16 Library

The Gwinnett Tech Library partners with the College to advance learning and workforce readiness. The library engages students, faculty and staff with ready access to relevant information resources and services.

The Gwinnett Tech Library:

- Engages on-campus and distance learners
- Teaches essential research skills to support the curriculum and self-directed lifelong education
- Conducts personalized research assistance
- Designs and delivers customized research instruction
- Provides quality resources made conveniently available by research experts through LibGuides, LibAnswers, GALILEO, and the Library Catalog
- Extends access to resources beyond the collection through referrals and Interlibrary Loan
- Provides space for quiet study and group projects, as well as comfortable areas for leisure reading and conversation
- Promotes a learning atmosphere in a safe, comfortable environment. Library staff will address inappropriate conduct or behaviors in accordance with acceptable use guidelines and policies
- Ensures that library customers have ready access to help from a team of friendly, service-oriented professional librarians and staff

Location, Contact Information & Hours

- Lawrenceville Campus: building 100, room 402
- Telephone: 770-962-7580 (extension 6388 or 6270)

1.17 Withdrawal and Refunds

Each semester, students' class schedules become official upon payment of required fees (either by the student or by award of financial aid). Students who drop a class during the drop/add period (on or before the third day of the semester for a full semester class, or on or before the second day of the term for a term C class) will be removed from the class roll, and the course will not show on the

student's academic record. A 100 percent refund is issued for classes dropped during the drop/add period of the term.

Thereafter, students may officially withdraw from a course without academic penalty by the designated withdrawal date for the semester and receive a "W" grade for the course. The "W" grade is not computed in the student's grade point average but does count in terms of financial aid eligibility. To officially withdraw from a course, students can withdraw online or meet with an Enrollment Advisor in the Enrollment Support Center to fill out the appropriate forms. Students who must withdraw from all classes will have to do so in person at the Enrollment Support Center. There is no refund for classes withdrawn after the drop/add period of the term.

Students who withdraw after the designated withdrawal date for the semester will receive a "WF" grade, unless a "W" grade is approved by the Academic Affairs Office through the [appeal process for hardship withdrawal](#). Students must follow the withdrawal procedure as described in the paragraph above. A "WF" grade is computed in the student's grade point average as a failing grade and counts toward the student's financial aid eligibility.

1.18 Career Services

The Career Services Center (CSC) provides a comprehensive assortment of job assistance services and resources to students, prospective students, and alumni. These services are designed to integrate career exploration and planning into the student's academic studies that prepares them for advancement into their respective fields of study upon graduation. Students develop extensive knowledge of job-search strategies, as well as a host of skills important to be successful in their career. A full range of student-focused programs and services are offered through the center and online, including individual and group career counseling, interest and aptitude assessments, mock interviews and resume preparation. The center is in building 100, room 604. Office hours are from 8:00 a.m. to 5:00 p.m. on Monday through Thursday, and from 8:00 a.m. to 4:00 p.m. on Friday. Students may visit the center or call 678-226-6252 to schedule an appointment with a career professional.

1.19 Student Life Center/Student IDs

The Student Life Center in building 100 of the Lawrenceville campus welcomes all students with current student identification badges. The Student Life Center is a place for special events and meetings for students. It is also a place to relax, meet other students, and learn about planned activities, student organizations, and how to get involved on campus. Student IDs can be purchased in the bookstore after registering for classes. Student Life's mission is to provide a world of opportunities to enrich the GTC experience. Opportunities available for students include workshops, seminars, fieldtrips, conferences, competitions, community projects, and school-wide events. Students may contact the Student Life Director for additional information at 678-226-6341.

Note: All students are required to have current Student IDs in their possession while on campus. Student IDs should be visible in the Student Life Center and all computer labs at all times and presented upon request by any college employee.

1.20 Additional Student Services

Visit <http://www.gwinnettech.edu/students/> to find information on all student resources found at Gwinnet Technical College.

SECTION II. DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM INFORMATION

2.1 Mission Statement

The mission of Gwinnett Technical College Diagnostic Medical Sonography Program is to offer a high quality and comprehensive didactic and clinical education in Abdomen-Extended and OB/Gyn Sonography that fulfills the requirements for credentialing through the American Registry of Diagnostic Medical Sonographers (ARDMS). The faculty and clinical instructors will do this by providing students the cognitive knowledge, psychomotor skills (clinical and technical skills), and applicable affective behaviors to safely and competently perform diagnostic sonographic exams along with the experience and work ethic required to be principal members of the health care team.

2.2 Accreditation

The GTC Diagnostic Medical Sonography Program is accredited through CAAHEP upon the recommendation of the JRC-DMS as of March 2014.



CAAHEP

Commission on Accreditation of Allied Health Education Programs
9355 - 113th St. N, #7709
Seminole, FL 33775
Phone: 727-210-2350
Fax: 727-210-2354
CAAHEP.ORG



JRC-DMS

Joint Review Commission on Education in
Diagnostic Medical Sonography (JRC-DMS)
6021 University Boulevard Suite 500
Ellicott City, MD 21043
JRCDMS.ORG

2.3 GTC Administration and DMS Program Faculty

Dr. Glen Cannon, PhD, Ed President Gwinnett Technical College
Rebecca Alexander, MA Vice President of Academic Affairs
Ryan Cheek, Ph.D., RVTg, VTS (ECC) Interim Dean, Health Sciences
Kim Strong, BA, AS, RDMS, RVT Program Director Building 200 Office #258 678-226-6701 kstrong@gwinnettech.edu
Kara Caldwell, BA, AS, RDMS Clinical Coordinator Building 200 Office #273 678-226-6679 kcaldwell@gwinnettech.edu

<u>Adjunct Faculty</u> Jennifer Palacio, RDMS Dasar Dalyoucif, RDMS Building 200 Office #121

2.4 Program Description

The Diagnostic Medical Sonography curriculum is designed to educate students toward credentialing as entry-level sonographers through the use of classroom instruction, lab performance and practical (clinical) application. The program integrates a professional education component and a general college core. These components will enable the student to reach their advanced goals and start them toward advanced college degrees if desired.

The GTC DMS program follows the Technical College System of Georgia's curriculum for Diagnostic Medical Sonography. This curriculum follows the National Education Curriculum as published by JRCDS (Joint Review Committee on Education in Diagnostic Medical Sonography). Didactic education is concurrent with lab and clinical experiences. The GTC DMS program is a full time, 21-month program, lasting 5 consecutive semesters. Course offerings are on Monday-Friday, day classes only. The clinical component may require second shift hours. Graduates earn an Associate Degree of Applied Science in Diagnostic Medical Sonography.

The program consists of 2 concentrations: Abdomen- Extended and OB/GYN which means the education emphasis is on abdomen, small parts, breast, obstetric and gynecological sonographic imaging techniques and pathology. Students also gain a thorough understanding of sonographic principles and instrumentation (SPI). They are required to pass the ARDMS (American Registry of Diagnostic Medical Sonography) SPI registry examination and attempt the ARDMS OB/GYN and Abdomen specialty examinations to meet program graduation requirements.

To earn the title of Registered Diagnostic Medical Sonographer, candidates must pass the ARDMS SPI registry examination along with a specialty examination (Abdomen or OB/GYN). The GTC DMS Program is CAAHEP accredited; therefore, students are eligible to take the ARDMS specialty exams up to 60 days prior to graduation.

The Diagnostic Medical Sonographer must be able to work in a cooperative setting with other professionals to provide quality health care to the total human being. Education is an ever-continuing process and as practicing professionals; one must continually improve skills and advance knowledge. Therefore, a professional education should include a combination of intellectual growth and self-development. A technical education which interacts with basic sciences, general studies, and the development of interpersonal relations will produce a technologist who will be able to function as both a member of society and of the profession.

2.5 Program Goals

The Diagnostic Medical Sonography Program, in concert with the mission and philosophy of Gwinnett Technical College, is committed to provide a quality and comprehensive education in Abdomen-Extended and OB/GYN sonography. Through didactic information, educational resources, and a variety of clinical experiences, the program is designed to develop competent, responsible, and independent sonography professionals. The program's mission is also supported by a dedicated team of experienced faculty, sonographers, and physicians who encourage and model life-long learning in the field.

The GTC DMS program goals are derived from the expectations of the communities of interest served by GTC, namely students, graduates, faculty, the college, employers, potential patients, and the sonography profession. **The goal of Gwinnett Technical College's Diagnostic Medical Sonography program is to prepare competent entry-level sonographers in the cognitive (knowledge),**

psychomotor (skills), and affective (behavior) learning domains for the Abdomen-Extended, OB/GYN, and Breast Concentrations.

Cognitive:

- ◆ Obtain, review, and integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results for each client.
- ◆ Demonstrate critical thinking skills while performing sonographic examinations to obtain the highest quality diagnostic images.

Psychomotor:

- ◆ Perform appropriate sonographic procedures and record anatomic, pathologic, and or physiologic data for interpretation by a physician.
- ◆ Record, analyze and process diagnostic data and other important observations made during the sonographic procedure for presentation to the interpreting physician as evidenced by critical thinking, technical abilities, and perseverance.
- ◆ Maintain optimal function of sonographic equipment.
- ◆ Utilize patient care and comfort skills.

Affective:

- ◆ Demonstrate appropriate communication skills with patients, colleagues, and others involved in the care of the client, act in a professional and ethical manner.
- ◆ Provide the patient and the public, education related to general sonography and/or other diagnostic vascular techniques and promote principles of good health.
- ◆ Exercise discretion and judgment in the performance of sonographic and/or other diagnostic services.

2.6 Program Learning Domains/Outcomes

Achievement of the stated program goal for Abdomen-extended, OB/GYN and Breast concentrations in all three learning domains is assessed through various aspects that include but are not limited to the Annual Report mandated by the Joint Review Committee in Diagnostic Medical Sonography, graduate surveys, employer surveys, advisory committee surveys, ARDMS SPI registry exam pass rates, ARDMS exam pass rates in Abdomen, OB/GYN, or Breast and employment statistics. The Imaging Sciences Advisory Committee also reviews the goal and learning domains and makes recommendations to the program faculty concerning necessary alterations to the learning domains when/if they deem any of them irrelevant to our communities of interest. Gwinnett Technical college requires review of the DMS program goals and learning domains through the Imaging Sciences Advisory Committee. The review and recommendations are recorded in the advisory committee's meeting minutes which are published on SharePoint.

The program faculty is also in constant contact with clinical affiliate administrators and clinical instructors for on-going assessment of course content and student clinical performance. Through conversations and interviews with clinical instructors and our advisory committee sonographers, GTC DMS faculty discerns proper content is being taught with accuracy from the clinical perspective. Continuous program assessment is done by the DMS program faculty through end of course surveys, GTC faculty evaluations, and clinical instructor evaluations of student performance.

Upon graduation from the Gwinnett Technical College Diagnostic Medical Sonography Program:

- Graduates will be clinically competent in the Abdomen-extended, OB/GYN and Breast Concentrations by possessing entry-level knowledge and skills gained through successful completion of the program.

- Graduates will function as independent productive sonographers as part of the imaging team.
- Graduates will have acceptable work habits and attributes to fill needs of the health care community.
- Graduates will have skills needed to problem solve in their work environment and careers.
- Graduates will utilize ergonomically correct scanning practices.
- Graduates will consistently be aware of potential ultrasound bioeffects and continuously implement ALARA standards.
- Graduates will have the desire for life-long learning and self-growth.
- Graduates will have attempted to pass the ARDMS certification examination in Abdomen and OB/GYN. (Breast as well if concentration status is approved and eligibility is confirmed by ARDMS.)
- Program will have an average student completion rate of not less than 70%.
- Graduates will find jobs within six months of graduation.

2.7 Description of the Profession

The Diagnostic Medical Sonographer functions as a healthcare provider who, working under the delegated authority of the supervising physician, serves as a medical imaging professional providing clinically relevant information to assist the physician with the diagnosis and treatment of patients. The Staff Sonographer role and responsibilities include providing diagnostic medical sonography services and its various clinical specialties. The Staff Sonographer activities performed are consistent with their education and training, and in accordance with facility policies and procedures and applicable professional standards. (See Appendix for model job description from the Society of Diagnostic Medical Sonography.)

2.8 Professional Memberships

ARDMS: American Registry for Diagnostic Medical Sonographers

The American Registry for Diagnostic Medical Sonography (ARDMS) is an independent, not-for-profit organization founded in 1975 that administers examinations and awards the following credentials:

- **RDMS – Registered Diagnostic Medical Sonographer**
- **RDCS – Registered Diagnostic Cardiac Sonographer**
- **RVT – Registered Vascular Technologist**
- **RPVI – Registered Physician in Vascular Interpretation**
- **RMSK - Registered in Musculoskeletal sonography**

SDMS: Society for Diagnostic Medical Sonographers

The Society of Diagnostic Medical Sonography was founded in 1970 to promote, advance, and educate its members and the medical community in the science of Diagnostic Medical Sonography. The Society achieves its purpose by:

- seeking the cooperation of similar organizations
- initiating and overseeing educational programs
- stimulating and encouraging research; encouraging presentation and publication of scientific papers
- collecting and disseminating information pertinent to the membership
- publishing a scientific journal and a newsletter
- and reviewing and establishing policies regarding the professional status, legislative activity,

and welfare of its members.

A typical member of the Society of Diagnostic Medical Sonography is anyone participating in or supporting the practice of diagnostic medical sonography.

Student Membership

Students are the future of sonography. The GTC DMS program pays for student memberships. They receive special student discounts plus all the benefits of membership except the right to vote and hold office. Membership gives you the information and tools to help meet your career goals and allows you to become proactive in SDMS. SDMS encourages and empowers students to become active individuals in the sonography profession. Student members receive *The Journal of Diagnostic Medical Sonography*.

There are many ways a student can participate in SDMS:

- Attend the SDMS Annual Conference with special student discounted pricing
- Learn and participate in the Student Conclave
- Enter SDMS Awards and Competitions
- Student Poster Exhibit Competition
- W. Frederick Sample Student Excellence Award
- Contribute to the Journal of Diagnostic Medical Sonography (JDMS)
- Network with other students and members through the SDMS Discussion Forums
- Participate in SDMS committees

To qualify for the student membership category you must be enrolled in a diagnostic medical sonography program. A letter from your program director verifying your student status and anticipated graduation date is required before your membership application can be processed. Dues \$40

AIUM: American Institute of Ultrasound in Medicine

The American Institute of Ultrasound in Medicine is a multidisciplinary medical association of more than 9000 physicians, sonographers, scientists, students, and other health care providers. Established in the early 1950's, the AIUM is dedicated to advancing the safe and effective use of ultrasound in medicine through professional and public education, research, development of guidelines, and accreditation.

The AIUM recognizes that you are the future of medical ultrasound. For that reason, the AIUM offers you all the **benefits of AIUM membership** at a greatly reduced rate. This membership category offers the opportunity to enhance your ultrasound expertise through educational material, research tools, networking opportunities, and career development. They also sponsor an annual convention that includes a SONOBOWL.

AIUM members who remain in training can continue to receive the appropriate dues rate so long as they continue to meet the criteria. If not, your AIUM dues rate will automatically be upgraded to the first-year career rate, half the cost of general membership. Membership is highly recommended but voluntary. The cost is \$25 annually.

AIUM Values

Quality of Practice

Support the highest quality practice of medical ultrasound by promoting effectiveness and patient safety.

- Develop evidence- and consensus-based specifications for performance and training.
- Educate clinicians about the cost savings and patient care benefits associated with performing ultrasound.
- Promote competency and high standards of care through programs such as ultrasound practice accreditation.

Collaboration

Collaborate with specialty societies, medical and sonography schools, insurance providers, industry, medical professionals, and others to build consensus and advance the practice of medical ultrasound.

- Facilitate communication among diverse interest groups within the ultrasound community.
- Develop practice parameters, training guidelines, and consensus statements with stakeholders.
- Partner with others to develop educational offerings (eg, webinars, courses, forums) on topics of mutual interest.

Education

Provide high-quality professional education, encourage lifelong learning, and promote the importance and value of medical ultrasound.

- Utilize innovative methods to deliver educational content.
- Expand educational content to address the needs of emerging specialties.
- Support the integration of ultrasound into medical school education.
- Encourage sonographers to be certified and non-physician medical professionals to be qualified in the specialty or specialties in which they perform sonographic evaluations.
- Raise awareness of the value and benefits of ultrasound among specialty societies, insurance providers, industry, medical professionals, and others.

Research

Support ultrasound research.

- Develop specific funding mechanisms to support medical ultrasound research in education, basic science, technology development, and clinical applications of ultrasound.
- Disseminate medical ultrasound research findings.
- Promote interaction between ultrasound users and investigators to advance medical ultrasound research.

Leadership

Maintain the AIUM as the leader in medical ultrasound.

- Capitalize on the multidisciplinary strengths of the communities.
- Identify and support emerging uses/users of ultrasound.
- Cultivate new leaders both within the AIUM and from emerging specialties.
- Continuously evaluate AIUM programs, initiatives, activities, etc. to ensure appropriateness and value to members and the medical ultrasound community.
- Champion equity, diversity, and inclusion in the organization and the field of medical ultrasound.

2.9 SDMS Code of Ethics

This program adheres to the premise that a code of ethics should be used to help define the role of Diagnostic Medical Sonographer and student. The Society of Diagnostic Medical Sonography Code of Ethics serves as a guide by which sonographers may evaluate their professional conduct as it relates to patients, colleagues, and other members of the health care team. Its intent is to assist the sonographer in maintaining a high level of ethical conduct and to better serve or improve the health care system.

Code of Ethics for the Profession of Diagnostic Medical Sonography

Approved by SDMS Board of Directors, December 6, 2006

PREAMBLE

The goal of this code of ethics is to promote excellence in patient care by fostering responsibility and accountability among diagnostic medical sonographers. In so doing, the integrity of the profession of diagnostic medical sonography will be maintained.

OBJECTIVES

1. To create and encourage an environment where professional and ethical issues are discussed and addressed.
2. To help the individual diagnostic medical sonographer identify ethical issues.
3. To provide guidelines for individual diagnostic medical sonographers regarding ethical behavior.

PRINCIPLES

Principle I: In order to promote patient well-being, the diagnostic medical sonographer shall:

- A. Provide information to the patient about the purpose of the sonography procedure and respond to the patient's questions and concerns.
- B. Respect the patient's autonomy and the right to refuse the procedure.
- C. Recognize the patient's individuality and provide care in a non-judgmental and non-discriminatory manner.
- D. Promote the privacy, dignity and comfort of the patient by thoroughly explaining the examination, patient positioning and implementing proper draping techniques.
- E. Maintain confidentiality of acquired patient information, and follow national patient privacy regulations as required by the "Health Insurance Portability and Accountability Act of 1996 (HIPAA)."
- F. Promote patient safety during the provision of sonography procedures and while the patient is in the care of the diagnostic medical sonographer.

Principle II: To promote the highest level of competent practice, diagnostic medical sonographers shall:

- A. Obtain appropriate diagnostic medical sonography education and clinical skills to ensure competence.
- B. Achieve and maintain specialty specific sonography credentials. Sonography credentials must be awarded by a national sonography credentialing body that is accredited by a national organization which accredits credentialing bodies, i.e., the National Commission for Certifying Agencies (NCCA); <http://www.noca.org/ncca/ncca.htm> or the International Organization for Standardization "To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the abdominal sonography-extended concentration." "To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the obstetrics and gynecology sonography concentration." "To

prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the breast sonography concentration.”

(ISO); <http://www.iso.org/iso/en/ISOOnline.frontpage>.

- C. Uphold professional standards by adhering to defined technical protocols and diagnostic criteria established by peer review.
- D. Acknowledge personal and legal limits, practice within the defined scope of practice, and assume responsibility for his/her actions.
- E. Maintain continued competence through lifelong learning, which includes continuing education, acquisition of specialty specific credentials and re-credentialing.
- F. Perform medically indicated ultrasound studies, ordered by a licensed physician or their designated health care provider.
- G. Protect patients and/or study subjects by adhering to oversight and approval of investigational procedures, including documented informed consent.
- H. Refrain from the use of any substances that may alter judgment or skill and thereby compromise patient care.
- I. Be accountable and participate in regular assessment and review of equipment, procedures, protocols, and results. This can be accomplished through facility accreditation.

Principle III: To promote professional integrity and public trust, the diagnostic medical sonographer shall:

- A. Be truthful and promote appropriate communications with patients and colleagues.
- B. Respect the rights of patients, colleagues and yourself.
- C. Avoid conflicts of interest and situations that exploit others or misrepresent information.
- D. Accurately represent his/her experience, education and credentialing.
- E. Promote equitable access to care.
- F. Collaborate with professional colleagues to create an environment that promotes communication and respect.
- G. Communicate and collaborate with others to promote ethical practice.
- H. Engage in ethical billing practices.
- I. Engage only in legal arrangements in the medical industry.
- J. Report deviations from the Code of Ethics to institutional leadership for internal sanctions, local intervention and/or criminal prosecution. The Code of Ethics can serve as a valuable tool to develop local policies and procedures.

2.10 Technical Standards and Essential Functions

Sonography students must perceive and integrate information from a variety of sources. The sources include oral instruction, printed material, visual media, and live demonstrations. Students must participate in classroom discussion, present oral reports and successfully pass written and computer-based examinations which include the interpretation of sonographic images. Completion of these tasks requires cognitive skills. In addition to the cognitive skills necessary in the classroom setting, students must demonstrate fine psychomotor skills to manipulate sonographic transducers, and sonographic equipment. Students must also demonstrate general professional behaviors such as team cooperation and the ability to communicate with others. Clinical education courses associated the sonography programs involve the application of knowledge and skills learned in the classroom and laboratory setting to actual patients in the clinical environment. Students must demonstrate intellectual skills by relating in a respectful and caring attitude toward all patients.

The following outlines the technical standards and essential functions a sonography student must be able to perform upon admission into the GTC DMS program. The sonography student must maintain these standards as he/she progresses through the program to continue with their didactic and clinical education. These technical standards are pertinent to all GTC DMS program concentrations.

As an affirmation that a student's health will permit the student to meet the documented technical standards of the program, students are required to sign the "acknowledgement of technical standards form" distributed via email once the student has been accepted into the GTC DMS program. There is also a question on the required health form for the student's physician to complete, asking their opinion on whether the student is in suitable physical and emotional health for successful participation in and completion of a Diagnostic Medical Sonography program and employment in a medical setting.

GTC DMS Program's Technical Standards and Essential Functions

Communication and Observation:

1. Communicate in a clear and concise manner in the English language to people in various departments.
2. Read and apply appropriate instructions in charts, notes, and records.
3. Comprehend and apply clinical instructions given from departmental personnel.
4. Utilize keyboard for inputting clinical data into console, computers, and charts.
5. Visually monitor patients and review images in dimmed light.
6. Ability to hear within normal limits (aided or non-aided).
7. Ability to visualize colors.
8. Visual acuity of 20/60 in at least one eye (glasses or contacts permitted).
9. Accept constructive criticism.

Physical Capabilities:

1. Move immobile patients from stretcher to exam table using proper ergonomics with assistance from department personnel.
2. Push wheelchairs, stretchers, and perform BLS.
3. Move loads of up to 50 pounds several times a day.
4. Reach up to six (6) feet off the floor.
5. Reach to position and roll patients side to side when necessary.
6. Maneuver ultrasound system throughout the clinical facility as needed for bedside exams.
7. Standing most of an 8-hour day.
8. Walking 4-6 hours a day.
9. Manual dexterity.
10. Ability to work long and/or irregular hours.

Intellectual and Communication Skills:

1. Ability to work in a noisy environment with many interruptions.
2. Ability to remember and recall a large amount of information.
3. Ability to accurately read and transcribe illegible handwriting or to know when to verify.
4. Ability to assess patient and other situations rapidly, determine the course of action, delegate activities to co-workers, and/or respond as appropriate.
5. Ability to explain procedures and patient preparations clearly, verbally or written.
6. Ability to calmly and politely cope in stressful situations, in emergency patient situations, or situations with other staff members.
7. Ability to assess work demands; organize and perform or delegate as needed.

8. Ability to effectively communicate in the medical environment with other health care professionals and patients/family members.
9. Ability to apply critical thinking skills when obtaining a clinical history from the patient and correlating that information with exam findings accurately.
10. Ability to maintain patient confidentiality at all times (HIPAA).
11. Demonstrate respect for a diverse patient population.

Technical Skills:

1. Adequately perform and continually perfect sonographic imaging techniques.
2. Understand and manipulate the ultrasound system’s knobology.
3. Perform using fine motor skills to manipulate the transducer and equipment.
4. Perform all procedures and protocols without critical errors.
5. Work in the dark.
6. Recognize and interpret patient body language.
7. Distinguish and interpret Doppler sounds produced by sonography equipment.

2.11 Formal Orientation

Approximately one week prior to the start of the Diagnostic Medical Sonography program, the selected students are required to attend the Diagnostic Medical Sonography Orientation. Orientation includes, but is not limited to, registration information, completion of a New Student Information and pertinent assessments, review of health history and physical exam forms, CPR/BLS instructions, and textbook purchase requirements. Students will have lunch with the current DMS senior class for a question-and-answer session and will be assigned a mentor. Review of GTC policies, DMS Student Handbook, and specific course syllabi will be done on the first day of class.

2.12 DMS Program Estimated Cost

APPROXIMATE- IN STATE		Estimated Cost	Additional Expenses
Pre-requisite course costs-	\$4000	\$ 4045	Transportation, supplies
GTC Application Fee	\$ 45		
DMS Program Expenses		Estimated Cost	Additional Expenses
Semester 1		\$3208	Transportation, supplies
Total Tuition	\$1718		
Fees	\$ 250		
Background/Drug Screen	\$ 90		
Scrubs/Uniforms/shoes	\$ 200		
Textbooks	\$ 550		
Immunizations as required	\$ 400		
Semester 2		\$1668	Transportation, supplies
Total Tuition	\$ 1418		
ARDMS SPI Registry fee	\$ 250		
Semester 3		\$1308	Transportation, supplies
Total Tuition	\$ 1218		
Textbooks	\$ 90		
Semester 4		\$1738	Transportation, supplies
Total Tuition	\$1618		
Fees	\$ 100		

TB test repeat	\$ 20			
Semester 5				
Semester 1:			Credits	plies
DMSO 1010 Foundations of Sonography	\$ 50		3	
DMSO 1020 Sectional Anatomy and Normal Sonographic Appearance	\$ 500		3	
DMSO 1040 Sonographic Physics and Instrumentation	\$ 80		3	
DMSO 1060 DMS Clinical Sonography I		\$10,170	4	
Total Estimated Cost of DMS Program		\$14,215	TOTALS 13	
Total Estimated Cost of AS degree DMS				
\$14,215 TOTALS 13				
Semester 2:				2.13 DMS Curriculum Sequence
DMSO 1050 Abdominal Sonography I			3	
DMSO 1070 Pelvic Sonography and First Trimester Obstetrics			2	
DMSO 1101 Clinical Sonography II Part A			5	
		TOTALS	10	
Semester 3:				
DMSO 1080 Sonographic Physics and Instrumentation Registry Review			1	
DMSO 1090 Introduction to Vascular Sonography			1	
DMSO 2021 Breast Sonography			3	
DMSO 1102 Clinical Sonography II Part B			1	
DMSO 2031 Clinical Sonography III Part A			1	
		TOTALS	7	
Semester 4:				
DMSO 2020 Specialized Sonographic Procedures			2	
DMSO 2010 OB Second and Third Trimesters			3	
DMSO 2032 Clinical Sonography III Part B			7	
		TOTALS	12	
Semester 5:				
DMSO 2040 Comprehensive ABD and OB/GYN Registry Review			2	
DMSO 2050 Clinical Sonography IV			10	
		TOTALS	12	
			54	

2.14 DMSO Course Descriptions

DMSO 1010 Foundations of Sonography (Prerequisite: Program Admission) Using classroom didactic instruction and laboratory experiences, this foundations course prepares students for the role of a sonographer. The course provides a base of knowledge and experiences from which complementary and subsequent courses build on. Topics include diagnostic medical sonography history; medical ethics and law; patient privacy and confidentiality; body mechanics, lifts and transfers; patient assessment

and administration of care; transducer care; response to medical emergencies; professionalism; medical and sonographic terminology; cultural competence; ergonomics: work related musculoskeletal disorders; basic sonographic physical principles and system operation; Maslow's Hierarchy of Needs, and sonographic scanning techniques. Student laboratory scanning hours are included in this course. Contact hours: Class - 1, Lab - 4. Credit hours: 3. (F)

DMSO 1020 Sectional Anatomy and Normal Sonographic Appearance (Prerequisite: Program Admission) This course combines the didactic education of sectional anatomy with active student participation in classroom laboratory experience. Information is weighted toward normal structures which are sonographically visible. Structures are described according to relative location and proportionality. Topics include: normal sectional anatomy of the neck, liver, biliary system, pancreas, genitourinary tract, spleen, peritoneal cavity, retroperitoneum, gastrointestinal tract, and vascular system structures within the upper and lower extremity; anatomic planes related to sonographic images; sonographic appearance and sonographic patterns of structures in the female and male pelvis, neck, liver, biliary system, pancreas, peritoneum and retroperitoneum, gastrointestinal tract, non-cardiac chest, and upper and low extremities; and related imaging, laboratory testing procedures and functional testing procedures. Student laboratory scanning hours are included in this course. Class - 1, Lab - 4. Credit hours: 3. (F)

DMSO 1040 Sonographic Physics and Instrumentation (Prerequisite: Program Admission) Sonographers apply principles of ultrasound in the operation of medical sonographic equipment to produce a sonogram. Knowledge of the interaction of ultrasound with tissue is important for image optimization, acquisition and interpretation of sonographic images, and critical to the accurate diagnosis of disease. Introduces concepts for the factors involved with diagnostic ultrasound principles and instruments. Emphasis will be placed on ultrasound physics, transducer construction, operation and characteristics, artifacts and adjustable physics parameters. Topics include: basic principles and wave analysis; propagation of acoustic waves through tissues; principles of pulse echo imaging; sonographic transducers and sound beams; hemodynamic and Doppler imaging; sonographic instrumentation; artifacts; quality assurance/quality control of sonographic instruments; bioeffects and safety. Student laboratory scanning hours are included in this course. Contact hours: Class - 2, Lab - 2. Credit hours: 3. (F)

DMSO 1050 Abdominal Sonography I (Prerequisite: DMSO 1010, DMSO 1020) This course combines the didactic education of normal and abnormal abdominal organs and structures with active student participation in classroom laboratory experience. Introduces advanced abdominal anatomy, sonographic appearance and procedures, pathology and pathophysiology for diagnostic medical sonography. Topics include: embryology; anatomy; protocols for all organs and organ systems of the abdomen and noncardiac chest; variants of normal and congenital anomalies; function of organ and organ systems; patient history and indications for examination; scanning techniques; normal sonographic appearance; pathology and pathophysiology; related imaging and functional testing results; normal and abnormal Doppler and color flow characteristics. Student laboratory scanning hours are included in this course. Contact hours: Class - 1, Lab - 4. Credit hours: 3. (SP)

DMSO 1060 Clinical Sonography I (Prerequisite: Program Admission) Provides students with a more detailed introduction into the hospital, clinic or other patient care setting work experience. This course covers the control of the physical parameters of the sonography unit and application of sonographic physics as it relates to image quality. Sonographic examinations are conducted under direct and

indirect supervision. Topics include: oral and written communication; provide basic patient care; equipment manipulation for optimum image resolution; ergonomically correct scanning techniques; perform basic sonographic examinations of normal and abnormal abdominal anatomy, superficial structures, pelvic structures and First trimester obstetrics; related imaging procedures and relevant laboratory findings; students must demonstrate progression of knowledge and scanning skills during this clinical rotation. Contact hours: Class - 0, Lab - 12. Credit hours: 4. (F)

DMSO 1070 Pelvic Sonography and First Trimester Obstetrics (Prerequisite: DMSO 1010, DMSO 1020) This course introduces gynecology physiology, pathology, and pathophysiology along with normal and abnormal embryonic and fetal development during the first trimester using diagnostic medical sonography. Topics include: the role of the sonographer in obstetric imaging; antepartum obstetric sonography evaluation; Doppler imaging for the obstetric patient; significant laboratory values in early pregnancy; anatomy, physiology, pathology and pathophysiology of the female pelvis; gynecologic patient care and imaging Course Descriptions 354 techniques; clinical assessment of obstetrical patient; normal first trimester; uterine and extrauterine assessment during the first trimester; first trimester complications; prudent use; and performance standards and documentation. Student laboratory scanning hours are included in this course. Contact hours: Class - 1, Lab - 2. Credit hours: 2. (Sp)

DMSO 1080 Sonographic Physics and Instrumentation Registry Review (Prerequisite: DMSO 1040) Provides a review of knowledge from previous courses and helps the student prepare for national certification examinations for sonography. Information concerning test taking skills will also be reviewed. Topics include: patient care, safety and communication; physics principles, ultrasound transducers, pulse-echo instrumentation, Doppler instrumentation; and quality assurance/quality control of equipment. Contact hours: 0, Lab - 2. Credit hours: 1. (Sp)

DMSO 1090 Introduction to Vascular Sonography (Prerequisite: DMSO 1040) This course is designed as an introduction into the field of vascular sonography. The general practitioner will be required to perform venous examinations of the lower extremity, arterial studies of the neck, and some Doppler studies within the abdomen. Emphasis is on the functional workings and settings associated with Doppler signals and waveforms. Topics include: machine/image settings for Doppler imaging; venous imaging of the lower extremities; arterial imaging of the neck; and vascular imaging of the abdomen, including aorta and its primary branches, vena cava, portal and hepatic veins, and renal arteries and veins. Student laboratory scanning hours are included in this course. Contact hours: Class - 0, Lab - 2. Credit hours: 1. (Su)

DMSO 1101 Clinical Sonography II - Part A (Prerequisite: DMSO 1060) This course provides students with continued work experience in a hospital, clinic or other patient care setting. Students conduct sonographic examinations under direct and indirect supervision while continuing to improve their communication, professionalism and critical thinking skills. Topics include: patient care issues; advanced scanning techniques; normal anatomy and pathologic conditions of the abdomen; normal and abnormal sonographic imaging of the male pelvis; normal and abnormal anatomy and pathology of the female pelvis; normal and abnormal uterine and fetal development through the first trimester. Contact hours: Class - 0, Lab - 15. Credit hours: 5. (Sp)

DMSO 1102 Clinical Sonography II - Part B (Prerequisite: DMSO 1060, DMSO 1101) This course provides students with continued work experience in a hospital, clinic or other patient care setting. Students

conduct sonographic examinations under direct and indirect supervision while continuing to improve their communication, professionalism and critical thinking skills. Topics include: patient care issues; advanced scanning techniques; normal anatomy and pathologic conditions of the abdomen; normal and abnormal sonographic imaging of the male pelvis; normal and abnormal anatomy and pathology of the female pelvis; normal and abnormal uterine and fetal development through the first trimester; and introduction to vascular sonography. Contact hours: Class - 0, Lab - 3. Credit hours: 1. (Su)

DMSO 2010 OB Second and Third Trimesters (Prerequisite: DMSO 1020, DMSO 1070) Using classroom instruction and laboratory experiences this course introduces the knowledge of fetal anatomy, pathology, pathophysiology and procedures for diagnostic medical sonography. Instruction emphasizes normal fetal growth, fetal anomalies and maternal complications throughout all the second and third trimesters. Topics include: fetal assessment in the normal second and third trimesters; extra-fetal assessment of the second and third trimesters; assess abnormal fetal growth; high risk obstetrics; fetal structural abnormalities; genetic abnormalities and syndromes; interventional procedures; post-partum complications; prudent use; and performance standards and documentation. Student laboratory scanning hours are included in this course. Contact hours: Class - 2, Lab - 2. Credit hours: 3. (F)

DMSO 2020 Specialized Sonographic Procedures (Prerequisite: DMSO 1010 and 1020) This course provides students with three independent areas of concentration. They are High Resolution Sonography, Interventional Sonography and Pediatric Sonography. I. High Resolution Sonography introduces superficial structure anatomy, pathology and procedures for diagnostic medical sonography. II. Interventional Sonography provides instruction in sonographic procedures which are considered invasive and/or require sterile procedures. III. Pediatric Sonography provides the sonography student with specialized imaging procedures for the pediatric patient. Topics include: Intervention Sonography: use of sonography in interventional procedures, transducer care, infection control, response to medical emergencies, contrast media, and organ transplant; High Resolution Sonography: contrast media, and organ transplant; High Resolution Imaging of anatomy and normal variants, function and physiology, indications for examination, sonographic imaging, pathology and pathophysiology, correlative and prior imaging, pertinent lab values; Pediatric Sonography: embryology, anatomy and normal variants, function and physiology, indications for examination, sonographic imaging, and pathology and pathophysiology. Student laboratory scanning hours are included in this course. Contact hours: Class - 1, Lab - 2. Credit hours: 2. (F)

DMSO 2021 Breast Sonography: (Prerequisite: DMSO 1010 and 1020) This course introduces breast anatomy and pathology as related to the field of sonographic imaging. Topics include: anatomy, congenital and developmental variants, and sonographic appearances of normal and abnormal breast structures; the sonographic technique, measurements, integration of data, and Doppler patterns in both normal and abnormal breast structures; scanning protocol and modification(s) based on the sonographic findings and the differential diagnoses; interventional and intraoperative procedures for breast; indications for examination correlative and prior imaging, pertinent lab values. Contact hours: Class - 2, Lab - 2. Credit hours: 3. (Su)

DMSO 2031 Clinical Sonography III (Prerequisite: DMSO 1101) This course provides students with continued work experience in a hospital, clinic or other patient care setting. Students improve skills in performing sonographic procedures previously introduced. Topics include: normal uterine and fetal development through the three trimesters including Course Descriptions 355 placental grading;

equipment manipulation for optimum resolution; manipulation of equipment to minimize biological effects; normal anatomy and pathologic conditions of the abdomen and female pelvis; fetal biometry including gestational sac size, crown-rump length, bi-parietal diameter and head circumference; ectopic pregnancies; normal anatomy of the venous and arterial systems of the body; abnormal conditions of the human vasculature system; high resolution sonography including small parts and musculoskeletal imaging; pediatric anatomy and sonographic techniques; interventional sonography including invasive procedures and biopsies; patient care issues; and demonstration of significant progression of knowledge and scanning skills. Contact hours: Class - 0, Lab - 3. Credit hours: 1. (S)

DMSO 2032 Clinical Sonography III (Prerequisite: DMSO 1102) This course provides students with continued work experience in a hospital, clinic or other patient care setting. Students improve skills in performing sonographic procedures previously introduced. Topics include: normal uterine and fetal development through the three trimesters including Course Descriptions 355 placental grading; equipment manipulation for optimum resolution; manipulation of equipment to minimize biological effects; normal anatomy and pathologic conditions of the abdomen and female pelvis; fetal biometry including gestational sac size, crown-rump length, bi-parietal diameter and head circumference; ectopic pregnancies; normal anatomy of the venous and arterial systems of the body; abnormal conditions of the human vasculature system; high resolution sonography including small parts and musculoskeletal imaging; pediatric anatomy and sonographic techniques; interventional sonography including invasive procedures and biopsies; patient care issues; and demonstration of significant progression of knowledge and scanning skills. Contact hours: Class - 0, Lab - 21. Credit hours: 7. (F)

DMSO 2040 Comprehensive ABD and OB/GYN Registry Review (Prerequisite: DMSO 1050, DMSO 1070, DMSO 2010) Provides a review of knowledge from previous courses and helps the student prepare for ARDMS national certification examinations for sonography. Information concerning test taking skills is also reviewed. Topics include: patient care, preparation and technique; instrumentation, normal pelvic anatomy; abnormal pelvic anatomy; extra-pelvic pathology associated with gynecology; pediatric sonography; post menopause; infertility and endocrinology; first trimester; placenta, amniotic fluid, umbilical cord; second and third trimester; congenital fetal anomalies; complications during pregnancy; fetal demise; coexisting disorders; HIPPA and patient care techniques utilizing a professional sonographer; anatomy and physiology of abdominal structures, small parts, and superficial structures; patient preparation and protocols for sonographic examination of abdominal structure; clinical indications, pertinent related diagnostic imaging procedures and laboratory tests; sonographic technique and appearance of normal anatomic abdominal structures, small parts; characteristic sonographic features and/or patterns of pathology in the abdomen, and small parts. Contact hours: Class - 0, Lab - 4. Credit hours: 2. (Sp)

DMSO 2050 Clinical Sonography IV (Prerequisite: DMSO 2032) Provides a culminating work experience in the hospital, clinic or other patient care setting for students to improve skills in performing procedures introduced during prior clinical and didactic courses to the level of an entry-level sonographer. Topics include: refinement of equipment manipulation techniques, performance of sonographic examinations as an entry level sonographer, role of the sonographer in performing interventional/invasive procedures, and completion of necessary competency requirements for graduation. Contact hours: Class - 0, Lab - 30. Credit hours: 10. (Sp)

2.15 Course Syllabi and Schedules

Students receive a detailed course syllabus at the beginning of each course. Information included, but not limited to, assignment descriptions, project due dates, test and quiz dates, grading criteria and reiteration of some program policies. Each DMSO clinical course syllabi states the specific course competencies and learning outcomes. Specific clinical competency requirements are found in multiple areas including the student's clinical notebook and on Trajecsys.

2.16 Program Grading Scale

See "Grading System" section, of the GTC Catalog. Also refer to each DMSO course syllabus for specific course grading criteria.

Letter Grades A = 90 - 100

B = 80 - 89

C = 70 - 79

D = 60 - 69

F = 59 and below

Students are required to maintain a 2.0 grade point average while in the DMS program.

****All tests and Final Exams are considered critical competencies and must be passed with at least a 70% or better to receive a passing grade in any course regardless of the grade prior to the exam. Final exams are not eligible for repeat. (See section 2.20 for more detail)**

****BONUS points:** Any Bonus points awarded to students on any DMS assignment can only be assessed if the assignment has a passing grade prior to granting the bonus points. Bonus points will not be used to allow a student to pass an assignment.

2.17 Textbooks, etc.

TEXTBOOKS to Purchase for Gwinnett Tech DMS Program		
DMSO 1010,1020,1050,1070,2010,2020	Hagen-Ansert. (2018) Textbook of Diagnostic Sonography. (8th ed.) Mosby. (2 volumes included) <u>Workbook for Textbook of Diagnostic Sonography</u> <u>Intro to Sonography and Patient Care</u> , 2 nd Edition, Penny	ISBN: 9780323826464 ISBN: 9780323826464 ISBN: 9781975120108
DMSO 1060, 1101,1102, 2031, 2032, 2050 (Program Purchases)	ACEMAPP.com Trajecsys.com	
DMSO 1040	<u>Understanding Ultrasound Physics</u> , 4th edition, Sydney Edelman URR.com	ISBN: 0-9626444-5-5

	or Davies Ultrasound Physics Interactive Mock Exam (CD-ROM or Download)	ISBN: 9780941022781
DMSO 1090	Ridgeway, D. (2013), Vascular, An Interactive Q&A Review for the ARDMS Specialty Exam. Davies.	ISBN: 0-941022-66-8
DMSO 2040 (Program Purchases)	URR- Ultrasound Registry Review for Abdomen and OB/GYN https://ultrasoundregistryreview.com/	

2.18 Classroom and Laboratory

- Sonography lecture and lab courses are taught in building 200, primarily in room 122. All sonography classrooms and labs are equipped for multimedia presentations.
- Sonography Lab resources include state-of-the-art ultrasound units.
 - 10 Mindray Systems; ergonomic workstations for each scan room; DVD tutorials for AB, OB, GYN, Breast and Vascular applications; case files; textbooks, anatomy/pathology models, ultrasound phantoms, and posters.
 - Intelligent Ultrasound Simulators for transabdominal and endovaginal sonographic imaging.
 - Peripheral vascular testing system
 - PACS- Cloud based
- Sonography students have access to GTC computer labs. Students have access to the Sonography Lab throughout the length of a program during assigned times, between on-campus classes, and during open lab sessions each semester.

2.19 Didactic Education

The didactic education portions of the Diagnostic Medical Sonography program consist of theory and principle courses. All sonography courses are sequential and specific to the semesters listed in the program curriculum. The Technical College System of Georgia mandated objectives for the DMS courses are included in the syllabus for each individual course. The TCSG mandated DMS curriculum follows the National Education Curriculum set forth by JRCDSM. The GTC DMS program concentrations are Abdomen-extended, Obstetrics/Gynecology and potentially Breast. All GTC DMS sonography students are introduced to vascular and musculoskeletal sonography. A detailed study of sonography principles and instrumentation, including Doppler principles and instrumentation and hemodynamics, is an integral part of the DMS program.

All didactic courses use a variety of instructional methods including all or some of the following: on-line research and/or presentations, homework assignments, and quizzes (announced and un-announced), case presentations, scenarios, lab assignments, exams, and writing assignments to assess the student's knowledge and problem-solving skills. The student is responsible for meeting all course requirements stated in the course syllabus by the deadlines listed in the syllabus.

All of the didactic courses require an accompanying lab component. These scan labs prepare students for clinical rotations, benchmarks, and clinical competencies. By attending these scan labs, students learn via hands-on equipment operation and patient examination methods. Imaging protocols are demonstrated and practiced. Scan labs are mandatory. Participating as a volunteer patient is not

required. Students will perform benchmark examinations (critical competencies Level 2 and 4) in the laboratory setting.

Didactic education is concurrent with clinical education experience, providing graduates with the skills and versatility needed to function in a variety of health care facilities that service diverse populations.

Examinations: During exams students must clear everything off their desks except for any materials that are specifically allowed by the instructor to be there. Turn off cell phones and other electronic devices and put them away. Students who fail to comply with this policy, or who are caught with any unapproved materials out during an exam may be charged with cheating (depending on the materials) and as a result will receive an F. Repeated offenses may result in failure of the course and dismissal from the program.

Graded exams will be handed back to students within one week for review and shall then be returned to the instructor. Students may not keep their exams because we must maintain all student exams in our student files for accreditation purposes. Students may make notes on the subject content that was missed on the exam, and some instructors may even provide explanation sheets for the items missed that students can keep, but they are not allowed to keep the actual exams or take them out of the classroom. Students may review their exams at any time by scheduling an appointment with their instructor. Student exams are kept in student files located in the program's file office.

Students should take a restroom break prior to taking an exam. While the exam is in progress, the student will not be allowed to leave the classroom until they have turned their exam in for grading. This policy will be flexible with longer tests and exams. Students who have a medical condition which precludes their ability to abide by this policy must present a doctor's excuse stating such prior to the first exam period. Emergencies will be dealt with on an individual basis.

Once an exam has been turned in, the student will not be allowed to have the exam in their possession again until it has been graded. Students should be sure to make any corrections on their exam prior to turning it in.

2.20 Critical Competencies (See Appendix for Chart of Critical Competencies)

Students must demonstrate skills and abilities that meet expectations outlined in the Program Objectives before they are eligible for graduation. The program course objectives devised by the TCSG, Program Director and Clinical Coordinator(s) are designed to ensure that students have the ability to perform ultrasound examinations at competent levels by the end of their didactic education and clinical training. Students must demonstrate knowledge of current scanning techniques in the field of medical sonography and ultrasound equipment manipulation before entering careers in sonography. GTC DMS program's critical competency system is divided into levels that allow students to demonstrate and to prove imaging progression, to demonstrate scanning technique, and equipment manipulation comprehension in the scan lab setting. All critical competencies are assigned based on where students are in the program and what they have been taught. The chart located in the Appendix outlines the competencies as well as the scoring requirements. All Critical Competencies must be passed as assigned since these are used to establish proof of progression. Failure to fulfill the requirements shows lack of progression in program requirements and the student will be dismissed from the program. Depending on the timing in the semester, students may be given the option to withdraw with a passing score versus late in the semester, will result in a Withdrawal Failure. A "WP"

will be considered if the issue arrives prior to midterm.

Critical Competencies include all DMSO course tests, final exams and Professionalism score which all must be passed with at least a 70%. Should a student not pass a course test, they will be required to complete a retest. The highest possible score for the gradebook on a retest is 69% regardless of the passing score on the retest. Students in the DMS program are only permitted to fail 3 tests while in the program in its entirety. Failure of a fourth test will result in program dismissal. Final Exams do not qualify for the retest policy and must be passed on the first attempt.

The GTC DMS clinical records/notebook is a critical competency that must score at least an 80% at the end of each clinical rotation. Additional critical competencies are:

Level 1 Critical Competencies- Graded scans performed by the student on a patient of their choice. The scan quiz must be completed by a certain date and saved according to instructions. Scan quizzes are required for the aorta, liver, gallbladder, pancreas, kidneys, spleen, pelvic, endovaginal pelvic (performed on simulator), endovaginal first trimester OB (performed on simulator), carotid, LEV, thyroid and 2nd/3rd trimester OB.

These critical competencies are graded based on anatomy, protocol, technical aspects (point in program considered), time and measurements. The student must pass all scan quizzes with a score of at least 70%. Student may only repeat 3 scan quizzes while in the DMS program. If a student has to repeat a scan quiz, the second attempt must earn a score of at least 70% however the highest score that will be entered in the gradebook is 69%.

Level 2 Critical Competencies: Benchmarks – Abdomen and Pelvic Benchmarks are performed on a specific date noted in the course syllabus. The student selects a random patient and performs the necessary patient interview. The student then performs the exam while a DMS faculty member watches. The student is assessed while scanning and the scan is reviewed immediately following completion. Feedback is given concerning the skill the student is performing well and in the areas that need improvement. The score is given at this time and both parties sign the score sheet.

Benchmarks are graded on components of psychomotor (technical), cognitive (didactic) and affective (professional) skills. *The student must pass all level 2 critical competencies with a score of at least 70%. (See next section for Failure to Pass on Level 2)*

Once all Abdomen Benchmarks have been passed, the student will receive a certificate to place in their clinical notebook that states they are consistently producing diagnostic images and progressing toward the graduate level in the program. At the clinical affiliate's discretion, they may be permitted to perform examinations under **indirect supervision**.

Due to time constraints, volunteer availability, and program curriculum, Level 2 critical competencies are in a different format for OB and Breast. For OB, the level 2 critical competency is the Area of Interest Scan Quiz completed at the end of semester 4 in DMSO 2010 lab. For Breast, the level 2 critical competency is assessed by the clinical instructor evaluation completed at the end of the student's first breast rotation, specifically questions 9 and 10.

Level 3 Critical Competencies: Clinical Check-offs- Students are assigned check-offs for every clinical rotation. They are given a Master Competency List located in the GTC DMS Clinical Notebook/Trajecs. These are scored by a credentialed sonographer in that specific specialty (AB-

Extended, OB/GYN, and Breast). The scoring is:

1- Developing

2- Acceptable

3- Consistently Reproducible

- To meet the Level 3 critical competency requirement in Abdomen-Extended and pelvic, the student must earn all 3's in the required check-off's by the end of rotation 6. For more detail, see the section 5.18-B, Diagnostic Medical Sonography Clinical Records.
- To meet the Level 3 critical competency requirement in OB, the student must earn the majority of 2-3's in the required check-off's at the end of their first OB. Meeting this standard will permit the student to begin their Level 5 critical competency at their next OB rotation. Should a student not complete the Level 3 critical competency with a higher number of 1's than 2-3's, they will be required to meet the standard at their next OB rotation prior to beginning the Level 5 critical competency.
- To meet the Level 3 critical competency requirement in Breast, the student must earn the majority of 3's in the required check-off's by the end of rotation 8 or their last Breast clinical rotation. The student must have all check-offs assessed during each Breast rotation. The end result that proves competence is progression to all 2's and 3's.

Level 4 Critical Competencies: Organ System Benchmarks- This level is performed in the same manner as the Level 2 critical competencies. Faculty attempts to recruit patients for these scans who are not classmates but does not always work out. The scoring criteria will change based on the point in the program. Time limits will also change. The organ system benchmarks are RUQ, Complete AB, renal, thyroid, pelvic, endovaginal pelvic (performed on simulator), endovaginal first trimester OB (performed on simulator) and carotid. Benchmarks are graded on components of psychomotor (technical), cognitive (didactic) and affective (professional) skills at the level expected based on the point in the program.

The 2nd/3rd trimester OB Level 4 critical competency is met in the form of the OB Portfolio assigned in DMSO 2010.

The Breast Level 4 critical competency will be met in the form of the Breast Phantom assignment performed during DMSO 2040 lab.

The student must pass all level 4 critical competencies with a score of at least 75%.

Failure to Pass Level 2 or Level 4 Critical Competencies

It is a requirement for graduation to pass ALL Level 2 and Level 4 critical competencies. In the event that a student scores below the required level on their initial attempt, he/she may make one additional attempt to pass, with the highest grade possible being 69 for Level 2 and 74 for Level 4. This final attempt must occur within two weeks of the second attempt. If the student still does not pass on this final attempt with a grade of at least 70 or 75 accordingly, a grade of "F" will have been earned. This grade makes it impossible for the student to proceed in the DMS program due to program Critical Competency requirements. **A student may only repeat 3 Benchmarks during their time in the program. Only 1 of these repeats can be a Level 4.**

If the DMS faculty or Clinical Instructor observes less than entry-level performance of a previously passed benchmark proficiency, the supervising sonographer may challenge the proficiency. All of the performance objectives for that proficiency must be repeated.

Level 5 Critical Competencies- Clinical: Complete Studies- A student is eligible to begin this level For

AB-Extended and Pelvic once they receive all 3's in their level 3 critical competencies but no sooner than their 5th clinical rotation. Students will be graded on complete exams performed at their clinical site. They must have completed the exam in its entirety. This exam is graded by GTC DMS faculty based on anatomy, technical skills, protocol, time, measurements, documentation of abnormal if indicated, and the diagnostic value of the study. Student must pass this level with each exam scoring at least 85%. **If the student misses pathology, the exam is an automatic failure and must be repeated. If a Level 5 exam does not pass, the student is allowed one additional attempt, but only 2 may be repeated.** Failure to pass any Level 5 critical competency will result in failure of the clinical course. The course will have to be repeated.

Process for grading of Level 5 Competencies:

- DMS senior students will be informed two weeks ahead of time when they will be receiving a site visit.
- Students are visited at least twice, allowing ample time for students to complete the exams for faculty to grade.
- If a student is unable to get an exam completed during a schedule visit, they can request for a faculty member to return to their site.
- Faculty requests must be made a week in advance.

For OB, the level 5 Critical Competency is a series of clinical assessments graded by their clinical instructor. This may be started during their second OB rotation and must be completed by the graduation. The student must receive all 2's and 3's on this critical competency. The Level 5 OB Critical competency is based on the CAAHEP standards. The overall score must score at least 85%.

For Breast, the level 5 Critical Competency is a series of clinical assessments graded by their clinical instructor. The students will have multiple rotations to complete this critical competency. It must be completed by graduation. The Level 5 Breast Critical competency is based on the CAAHEP standards. The overall score must score at least 85%.

2.21 Graduation Requirements (Critical Competencies for DMSO 2040/2050)

While considerable guidance and advisement will be provided for each student, they must clearly understand that it is the student's own responsibility to complete all program requirements prior to the expected graduation date.

Program completion guidelines:

1. Student must receive a minimum grade of "C" but also maintain a semester GPA of 2.0 to remain in the program. If a student's GPA falls below a 2.0 in any semester or earns below a "C" in any professional course, he/she will be dismissed from the program.
2. Students must have passed all Critical Competencies according to the previous section and the chart in the appendix. The student will be withheld from graduation if all requirements of the Critical Competency System have not been completed as required.
3. Students must pass the ARDMS Sonographic Principles and Instrumentation Registry Exam prior to graduation. The student will be withheld from graduation until the SPI Registry Examination has been passed.
4. Students must have documented at least 1250 clinical hours in order to graduate from the program. Additional clinical time may be required and will delay the student's graduation.
5. The students GTC DMS Clinical Notebook/Trajecsys records must be completed accurately

throughout the program and for their last rotation prior to graduation. Failure to document clinical requirements of the program will result in the student being withheld from graduation.

6. Students must have attempted the AB and OB/GYN ARDMS Registry Examinations during their final semester in the GTC DMS Program. (Breast will be required when permitted by ARDMS.) Failure to attempt these examinations will result in delayed release of the student's degree until the requirement is met.

2.22 Imaging Sciences Advisory Committee

Valerie Rogers, Imaging Educator and QI Northside Gwinnett Hospital
Dr John Chenevey, M.D., DMS Medical Advisor North Metropolitan Radiology Assoc
Kerry Banton, Project Coordinator Northside Hospital
Angel Meeler, RDMS, RVT, Ultrasound Technologist Piedmont Athens Regional
Adrielyn Jackson, RDMS, Ultrasound Program Coordinator Kaiser Permanente, Georgia
Sara Logan, RDMS, Lead Sonographer Piedmont Athens Regional
Megan Rausch, RDMS, Lead Sonographer Emory John's Creek
Alesia Murawski, RDMS, RVT NGHS
Azra Sabanovic, RDMS, RVT NGHS-Braselton
Roxanne Fowler, RDMS, RVT Wellstar Roswell Imaging
Jane Watson, Applications Specialist Intelligent Ultrasound/Medaphor
Megan Rausch Emory Johns Creek
Carrie McMakin Radiology Mgr, CHOA Scottish Rite
Ellen Nicholas Administrative Director Diagnostic Imaging, Eastside Medical
Cody Evans, MBA, CRA, RT(R) Director of Site Imaging, Wellstar North Fulton
Laura Ricker, RT (R) (CT) Radiology Manager, Northside Duluth
Emily Myers, RDMS Lead Sonographer, St Mary's Hospital, Athens
Debbie Mooney, Public Member Jackson County Senior Staff Accountant

Student Member (changes every meeting)

SECTION III. DMS POLICIES AND PROCEDURES

3.1 Student Professionalism Score

Students will begin with a Professionalism score of 100 points, and will be evaluated in the classroom, lab and clinical site setting, according to the guidelines outlined in the Work Ethics and Employability Skills and the DMS Policies and Procedures standards. Students receive points based on numeric grade in Professionalism that will be deducted from their final average in the DMSO course.

1. Professionalism score of 96 % = 0.5 point deduction
2. Professionalism score of 95-90 % = 2 point deduction
3. Professionalism score of 89-85 % = 5 point deduction
4. Professionalism score of 84- 80 % = 8 point deduction
5. Professionalism score of 79-75 % = 14 point deduction
6. Professionalism score of 74-70 % = 20 point deduction
7. Professionalism score < 70 % = 31 point deduction- Course failure

Demerit Counts

Students begin the semester with 100 Professionalism points. **DMS program faculty reserve the right to add demerit categories to this list.** Other components under this category are sleeping during program hours, not performing and assigned scan or task, lack of respect for the lab- not cleaning as required, and other topics under DMS program faculty's discretion. Results of infractions are demerits in the student's professionalism score. For any of the following issues encountered, they lose the designated number of points. **A score of 70%, or better, must be maintained to successfully complete any course and the program. The DMS coursework is sequential and being dropped from a class will not be conducive with progression in the DMS program. DMS Program Faculty will determine if the student can re-apply to the program based on the severity of the infractions leading to their diminished professionalism score.**

<u>Issue:</u>	<u>Points</u>
• Absence from class/lab/clinical regardless of reason- up to 2 days/semester (Death in the family or extended illness will be taken into account and could only be counted as one absence. Physician's note necessary.)	4 per day
• Additional absence- 3 or more	10 per day
• Failure to notify instructor/clinical affiliate of impending absence prior start of the class/lab/clinical day	10 per occurrence
• Failure to turn in absence form by next on-campus day	4 points per occurrence
• Tardiness to any DMSO course	5 points per
• Negative performance in any Work Ethic category	20 per occurrence
• Failure to adhere to DMS program class/lab or clinical policies/procedures	15 per occurrence
• Nonadherence to college policies/procedures	15 per occurrence
• Inability/Refusal to follow directions	15 per occurrence
• Failure to turn in assignments or clinical paperwork on time	5 per occurrence

- Leaving clinical unit before designated time without instructor notification/approval 10 per occurrence
- Use of electronic device in clinical area including Smart watches 10 per occurrence
- Social Media Policy Breach 20 per occurrence
- DMS Behavioral Violations 10 per occurrence
- Class/Lab/Clinical Participation issue 5 per occurrence
- Negative conduct report by CI 15 per occurrence
- Smart Watch use at clinical while interacting with sonographer, patient, other clinical personnel or GTC DMS faculty. 10 per occurrence

Students receive and sign a copy of DMS program class/lab and clinical policies and procedures. The GTC college catalog can be accessed online at www.gwinnetttech.edu.

3.2 DMS Participation:

Participation and punctuality in classes/clinical is one of the student's primary responsibilities. Time lost can never be replaced. DMS program students will be granted 2 clinical comp days to be used at their discretion, however there are some stipulations. Comp time:

- Can be used for illness or for personal reasons.
- Does not have to be made up.
- Comp time only accrues for rotations 1-6.
- Comp time can only be used through rotation 7.

If personal, the following apply:

- Cannot be used on the first or last day of a clinical rotation.
- Cannot be used on the Friday or Monday before/after spring break or Thanksgiving break.
- Cannot be used if the student is at a specialty site one day a week during a rotation (i.e. breast or OB).

DMS Students can earn additional comp time:

- Perfect attendance during a clinical rotation= 2 comp hours
- Perfect attendance to all DMSO on all campus courses per semester= 2 comp hours
 - Tardiness negates this with ½ hour deducted for each tardy

Students are responsible for monitoring their own clinical hours as it is a graduation requirement to have a minimum of 1250 clinical hours. They must take into account inclement weather closures, clinical affiliate requested closures, and mandatory program meetings/events, etc. This does not mean that once a student reaches 1250 clinical hours, they have completed the requirement. Students must attend their clinical rotations as the date's mandate.

In the event that an absence or tardy is deemed necessary by the student, he/she is held accountable for all work missed. If a student has a contagious disease (severe cold, Covid, flu, etc.) noted by the student, instructor or physician, then the student will be expected to refrain from attending classes/clinical and will be expected to seek prompt medical attention and follow-up medical care.

Students who suffer from a prolonged illness, resulting in absences beyond the number allowed for a course, may be dropped from the course(s) and subsequently from the program. These situations will be assessed on a one by one basis. The program director has full authority to decide on the best plan

of action: extend clinical through an IP or require the student to withdraw and restart the program with stipulations.

It is the student's responsibility to make arrangements prior to an illness to have a plan for medical treatment for illness for themselves and their dependents. Students should also have a plan for child care in the event of a dependent's minor illness. It is best to have these plans in place before an illness occurs to prevent problems later on.

Any absence that is not covered by comp time is required to be made up as per program policy. Students must inform faculty if using comp time by indicating so on the required absence form.

For any absence, the DMS instructor, program director and the clinical affiliate must be notified 30 minutes prior to the start of class/clinical. Students are provided with faculty and clinical affiliate contact information. An absence for must be turned into DMS faculty on the next day that the student is on campus.

Notification methods:

- Faculty: email
- Clinical: phone call, voicemail. Students may leave a message with any sonography departmental staff. They do not have to speak with the lead technologist.
- No notification is necessary for tardiness. For professional considerations, you may want to call your clinical affiliate if your tardiness will be more than a few minutes.
- DO NOT TEXT Clinical Instructors.

Terms and conditions:

1. For all didactic/laboratory /clinical sessions, a student more than 30 minutes late will constitute an "absence", pending the reason for the tardy.
 - A tardy constitutes 1-29 minutes late
 - Habitual tardiness (5 per semester) will not be tolerated. A sixth tardy in the same semester will result in an automatic 30-point deduction from the professionalism score.
 - Habitual tardiness is considered when tardy to any and all DMSO courses and is cumulative for each semester.
2. If DMS faculty is not notified of an absence before class has started, the absence will be considered "unexcused" and the student will receive "zeros" on any assignments for the day.

3.3 Work Ethic

Nationally, as well as in Georgia, employers have expressed concerns about work ethics as one of their top issues. The U.S. Department of Labor estimates that 80 percent of workers who lose their jobs do so not because of the lack of occupational skills, but because of poor work ethics. In response, the Technical College System of Georgia requires that technical education include occupational skills and work ethics. These traits will be formally covered in DMSO 1060 and reiterated in all lab and clinical courses.

The curriculum for GTC work ethics was developed by the college. The ten work ethics traits are:

- Participation: the student attends class, arrives/leaves on time, notifies instructor in advance of planned absences, and makes up assignments punctually.

- Character: the student displays loyalty, honesty, trustworthiness, dependability, reliability, initiative, self-discipline, and self-responsibility.
- Teamwork: the student respects the rights of others, is a team worker, is cooperative, is assertive, displays a customer service attitude, seeks opportunities for continuous learning, displays mannerly behavior.
- Appearance: the student displays appropriate dress, grooming, hygiene, and etiquette.
- Attitude: the student demonstrates a positive attitude, appears self-confident, and has realistic expectation of self.
- Productivity: the student follows safety practices, conserves materials, keeps work area neat and clean and follows directions/procedures.
- Organizational skills: the student manifests skills in personal management, time management, prioritizing, flexibility, stress management, and dealing with change.
- Communication: the student displays appropriate verbal and nonverbal skills.
- Cooperation: the student displays leadership skills, appropriately handles criticism and complaints, demonstrates problem-solving capability, maintains appropriate relationships with supervisors and peers, and follows chain of command.
- Respect: the student deals appropriately with cultural/racial diversity, and does not engage in any harassment of any kind.

3.4 Diagnostic Medical Sonography Program Social Media Policy

Students of the Gwinnett Technical College Diagnostic Medical Sonography Program participating in class/lab/clinical experiences are held to the same confidentiality standards as the employees of the college and any assigned clinical site.

Confidentiality standards are enacted to protect any information pertaining to patients, procedures, policies, and identification of clinical sites. The standard of confidentiality extends to include any and all Social Media Networking Sites. (Facebook, Instagram, Twitter, etc.)

Students are required to comply with and abide by all DMS lab policies as well as clinical site policies and procedures including posting on social media networking sites. Students are also subject to the same penalties as employees of the college and clinical site, including immediate dismissal from the clinical site resulting from breach of the social media policy and possible dismissal from the program (based on timing of issue and effect on clinical grade).

Students are strictly prohibited from posting any information pertaining to or descriptive of a clinical site, DMS faculty, patient, employee, or procedure. This includes revealing the location of the clinical site either by posting or by GPS locator evidence. The use of social media to post negative or derogatory comments about a patient, clinical site, clinical instructor, faculty member, staff member, or fellow student is strictly prohibited.

Posting any comments that would reflect on the clinical site is prohibited. Any disgruntled comments pertaining to the GTC DMS program, clinical experience or form of clinical instruction is also prohibited. It should also be noted that posting of any unfavorable comments during class or clinical hours (i.e. on break or lunch) regarding personal issues may be interpreted as a breach of this policy. The student must refrain from any identifiable posting during class/clinical hours or be subject to the penalties of breaching the social media policy.

To avert infractions, the student is required to research their clinical site's policies and procedures, in particular the social media policy. Violations of the social media policy will result in a reduction in the student's clinical grade and lead to immediate dismissal from the clinical site where the infraction occurred. Refer to the Professionalism Score in your handbook and syllabi.

Also, failure to comply with the clinical site's social media policy may result in additional disciplinary actions specific to and directed by the clinical site. If these stated actions call for removal from the clinical site, this will also lead to program dismissal. Depending on the severity of the infraction, the DMS program director will determine if the student is eligible to reapply to the DMS program the next application period. Be aware that violating the social media policy for this program may also violate federal law under the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

<http://www.hhs.gov/ocr/privacy/hipaa/understanding/summary/index.html>

3.5 Campus Inclement Weather Policy

In the case of Inclement Weather, students should listen to 95.5 FM for area weather watches and warnings, school closings, etc... If the college closes due to inclement weather, DMS faculty will email students information and assignment instructions. Students will be held accountable for the information contained in the email unless there is proof of a power outage or internet interruption.

3.6 DMS Didactic/Clinical Didactic/Technical Deficiency System

Student progression is monitored closely via lab scanning assignments and clinical site visits. Feedback is given routinely, often verbally as well as written. Program faculty also receive verbal feedback concerning students during site visits. It is program policy to intervene early whenever faculty feels a student is not progressing at the rate expected or the clinical affiliate expresses a concern in some area of their clinical education. The student(s) are counseled when the deficiency is recognized. Faculty does not wait until a midterm or final formal evaluation before offering assistance, advice or instruction.

The following steps are taken to make sure the student is aware of the deficiency, aid in developing a plan to correct the issue, as well as acknowledge the repercussions for not overcoming the deficiency.

Step 1: Verbal, informal conference with the student to identify the issue. Allows the student to point out trouble areas and suggest techniques that might help them. Faculty will also make suggestions as to how the student can improve.

Step 2: Deficiency not being overcome- formal written evaluation stating the area of deficit as well as examples of the issue. Faculty will lay out a plan for the student to demonstrate progression in the area needing improvement. A timeline will be set for the student to meet comply with the items listed.

Step 3: Adequate progression was not met by the deadline for step 2. The student is put on formal probation. A series of accomplishments will be stated with a deadline set. If the student fails to demonstrate adequate progression by this final deadline, they will be dismissed from the program. They will receive a score of zero on any graded components of the plan that were not met thus causing them to fail the course. Depending on the nature of the deficit, it could lead to the failure of multiple courses.

Step 4: Program dismissal

3.7 Didactic/Clinical Behavioral Deficiency System

The professionalism score will be used as well as the following:

- 1) Warning: Affective Domain Performance Notification- written warning.
- 2) Conference: reprimand. The student will have a counseling session with the program director. Disciplinary reprimand will result in the drop of one letter grade for the didactic course or for the DMS faculty evaluation grade if a clinical course for that semester. Continuation of misconduct will result in progression to step 3.
- 3) Probation with possible suspension: Issue remains a problem to parties concerned. Steps toward resolution are written out for student to sign as acknowledgement of expectations and consequences.
- 4) Withdrawal: Failure to meet probationary requirements in the time specified.

The offenses are cumulative, not necessarily repetitive violation of the same rule or policy. The student should be aware that the seriousness of the offense may require that some or all of the normal steps may be skipped. Suspension will affect participation, and will be counted as absences. See Participation Policy in this DMS Student Handbook.

DMS Behavioral Violations

Category One Offense: Violations of these rules are serious in nature and will result in suspension or immediate dismissal. A student dismissed for a Category One violation will NOT be eligible to return for enrollment in the DMS Program. Examples of Category One offenses include, but are not limited to, the following: (DMS Faculty reserve the right to declare behavioral violations.)

1. Fraudulent completion of clinical assignment(s) to include time and participation documentation.
2. Violation of any clinical affiliate policies.
3. Sleeping while on clinical assignment.
4. Cheating on an academic examination.
5. Reporting to academic or clinical assignment under the suspected influence of alcohol or illegal substances.
6. Reporting to academic or clinical assignment in the possession of alcohol or illegal substances.
7. Use of alcohol or illegal substances while on school or affiliate site property for academic or clinical assignment.
8. Theft of hospital/affiliate, patient, school, or employee property.
9. Willful destruction of hospital/affiliate, patient, school, or employee property.
10. Arrest and conviction of a felony.
11. Arrest and conviction for illegal use, possession, or distribution of illegal substances.
12. Insubordination to include refusal to perform assigned task or obey instructions.
13. Negligence or deliberate oral or physical abuse in the care and treatment of patients, guests, students, or employees.
14. Breach of confidential information as stated in previous sections, pertaining to clinical policy or GTC DMS policy.
15. Falsification of any official hospital/affiliate records.
16. Immoral or lewd conduct on school or affiliate property.
17. Unethical behavior.

18. DMS program director reserves to right to add to this list at any time or declare a student's actions as a category one offense.

Category Two Offense: Violations of these rules are considered in a range of less serious to serious in nature. However, depending on the severity of the offense or multiple offenses, the progressive disciplinary action for the following will be written warning, reprimand, suspension and then dismissal. Examples of Category Two offenses include, but are not limited to, the following:

1. Failure to report for clinical assignment without contacting the clinical instructor and the clinical coordinator.
2. Failure to attend an academic class without informing the DMS faculty.
3. Failure to report illness to school, i.e. notify the program office and the clinical site.
4. Excessive tardiness.
6. Sleeping in class during academic time.
7. Continued late completion and/or submission of academic and/or clinical assignments.
8. Loitering in non-assigned areas of any clinical assignment.
9. Smoking, eating, drinking, or chewing gum in non-designated areas.
10. Horseplay and unprofessional conduct or behavior in or around patient care areas or academic classes.
11. Abusing the approved time for lunch period.
12. Use of cell phone while on clinical duty.
13. Reporting to a clinical or academic assignment in improper attire, appearance or grooming as defined in the Classroom Policy and the Dress Code and Grooming Policy.
14. Continued violation of Dress Code and/or Grooming Policy will result in dismissal.
15. Unsatisfactory attitude.
16. Breach of professional confidence.
17. Use of profanity at school or on clinical assignment.

3.8 Academic Dismissal

To pass a class, students must earn a "C" or better however students in the DMS program are required to maintain a 2.0 GPA each semester. Students will receive a warning if their academic status appears to be in jeopardy along with counseling from DMS faculty. Clinical courses tend to carry a lot of weight in GPA calculation due to the high credit value. Failure to pass critical competencies will result in academic dismissal.

3.9 Program Dismissal

The Program Director of Diagnostic Medical Sonography reserves the right to recommend dismissal of a student for any of the following reasons:

- A. Insubordination, as applied to not following program policies or faculty direction.
- B. Intoxication on campus or at clinical education centers due to chemical abuse.
- C. Unprofessional or unethical conduct, as defined in national professional standards.
- D. Student misconduct as defined in the GTC Catalog.

The Program Director will follow the procedure for filing a complaint with the Student Disciplinary Officer as stated in the GTC college catalog.

3.10 Reinstatement

Students who have withdrawn from the Diagnostic Medical Sonography program after having successfully completed at least one semester of professional coursework, are in good standing

academically as well as professionally AND have demonstrated adequate progression/comprehension according to program faculty may request reinstatement.

If a student elects to petition for reinstatement, the request must be made for the succeeding school year to avoid retaking professional courses which were previously completed. **Students will be expected to demonstrate competency in previously successful program coursework.** If a student delays a request for reinstatement beyond the immediately succeeding school year, they are no longer eligible for reinstatement and must follow the admission process. Students, who have been provided a second opportunity through the reinstatement or readmission process, will not be considered for a third opportunity in the event of a second dismissal or withdrawal.

Students dismissed for professional/behavioral issues are not eligible for reinstatement.

3.11 Emergency Leave Policy

If the student is unable to attend the program course or clinical for an extended period of time (1 week), the student's physician must provide a release letter stating when the student is able to return to class. Any absence longer than 1 week will require a conference with DMS faculty to determine the student's path.

Students who withdraw from the program due to illness or pregnancy **and** who are in good academic standing at the time of withdrawal will gain readmission in the next scheduled class of students or within one year if the withdrawal date; however, she/he must submit an application for readmission and go through the readmission verification competency.

Students readmitted to the program may have to retake coursework at their own expense in order to refresh knowledge and technical skills. The student is expected to fulfill all assignments as required, unless physically unable. If it is medically necessary to remove the student from the clinical setting, he/she may be able to continue in the didactic portion of the program. However, students must complete all clinical competencies required before being eligible for graduation from the program. This could result in a delay in program completion beyond the expected graduation date. Individual plans will be made by the program director.

3.12 Pregnancy

If pregnancy occurs while a student is enrolled we will work with the student in every way possible to help meet their goals. Students who are pregnant may attend classes, labs and clinical as long as their physician recommends it. Late term pregnancies may require a note from the student's physician stating that they may continue in the program up until a specified date. Pregnancies with complications may require the student to withdraw from the program and apply for readmission for the following year.

The student has the option to withdraw from classes at any point during the pregnancy and a spot will be reserved for them in the program the following year so that they may complete the program. In some cases, students may be required to withdraw from clinical courses, but may be allowed to complete didactic courses. This is determined on an individual basis according to physician recommendations.

Students who become pregnant are not permitted to scan themselves nor are other students permitted to scan pregnant classmates unsupervised due to possible bioeffects that could result. Scanning of this nature may only be performed under the supervision of a Gwinnett Tech instructor with close monitoring and a written waiver must be signed by the student or volunteer prior to any scanning activity.

3.13 Early Graduation

It is the philosophy of the program faculty that education is an ever-continuing process and that one must continually improve skills and advance knowledge. Thus, we believe that a professional education includes a combination of intellectual growth and self-development which is necessary to become a competent sonographer. For a student to show this development, he must maintain Continued Proficiency through all five semesters. In addition, DMSO courses are sequential and only offered once every 20 months. Thus, each student must complete all five semesters to graduate from the program.

3.14 Student Work Policy

Some of our students must work while attending school. We recommend not working more than 20 hours each week if at all possible. The Sonography Program will, in itself become a full-time commitment for the student. It has been our experience that many students who attempt to work more than 20 hours each week tend to perform poorly and usually do not graduate from the program.

The sonography student may not work at a clinical site during scheduled clinical hours. A student may be hired to work for a clinical site outside scheduled clinical and class times, however the college takes no responsibility for the student in these conditions and the clinical site employer is hiring the student at his/her own risk. The student's malpractice insurance does not cover students to perform ultrasound exams outside of regularly scheduled clinical hours. Additionally, students are not allowed to work at their clinical sites during clinical hours. If a student has or acquires a job at their clinical site they may not work for that site until after clinical hours have concluded. Students at their assigned clinical site cannot be substituted as/for a paid employee and the experience is for educational purposes only.

Students may work in their free time but will not be permitted to leave class or clinical to go to work.

3.15 Advanced Placement Policy

A student who is seeking advanced placement in the Diagnostic Medical Sonography curriculum must meet the criteria established for initial acceptance into the curriculum. This will include evaluation of previous course work and may require testing in the didactic areas of sonography as well as clinical skills. The admissions office and the program director will determine transfer credit for previously earned general education and sonography credits. GTC's policies for transfer of earned credit can be found in the college catalog. Upon acceptance into the program, an individual educational plan will be developed for the student. DMS course curriculum cannot be altered so the student will have to wait until required courses are offered. A minimum of 40% of total coursework must be completed at Gwinnett Technical College to be awarded a degree. There is no provision for a waiting list or the selection of alternates. If the total student capacity is at its maximum, there may not be a position for acceptance of an advanced placement applicant. Previous course work is not a guarantee for a position in the program.

3.16 Communication and Email

Gwinnett Tech student email addresses are automatically issued to all students within 48 hours following acceptance to the college. A link to the GTC *Dashboard*, the student portal with access to email, is provided from the college website www.gwinnetttech.edu.

Student email is the college's primary means of communication between students, faculty, and college administration. For help in using student email please see the "First Time Users" link on the portal page at <https://mycampus.gwinnetttech.edu>. If you encounter any issues please email accounts@gwinnetttech.edu.

DMS faculty utilizes email daily. Students are required to set up the account and check it daily. Crucial information will be missed if this is not done. DMS faculty will not communicate with program students through personal email accounts.

Texting will be addressed in each course syllabus.

3.17 Computer Labs

There are no open computer labs in building 200. Use of these labs must be reserved by GTC faculty. There are computers and printers in the student lounge on the second floor. Food and drinks are not allowed near computer equipment (this includes scanners and any other electronic equipment). To prevent viruses, removable media such as flash drives, DVD's, and CD-ROMs that are used should be designated for use only on school computers. All internet surfing should be education-related and students should not open attachments from personal email on the school computers unless it comes from an instructor on your TechLink email account. Students should never attempt to install software on the computers. Only Information Tech (IT) staff are allowed to install software on computers. Drug & Alcohol Use See the policy in the college catalog under the Student Code of Conduct.

3.18 Academic Calendar

Academic calendars are available online at www.gwinnetttech.edu or in each course syllabus.

SECTION IV: DMS LAB POLICIES AND PROCEDURES

4.1 Lab Scan Stations

All students using the lab are responsible for its maintenance and cleanliness. Students are expected to treat this lab as if they paid for it themselves.

1. EQUIPMENT

- The machine should not be touching the stretcher or the wall.
 - The stretcher should not be touching the machine or the wall.
 - If you have to move the machines, do it slowly and carefully. WATCH all cords that are attached.
 - Machines and monitors MUST be plugged into the surge protectors.
 - TGC's should be in a straight line, centered after every exam.
 - Intelligent Ultrasound Simulator room should be treated the same as a scan station.
2. All scanning rooms should be left in an organized, clean manner daily. Not all inclusive, common sense must be used.
- All transducer cords should be off the floor and cradled on a hook, regardless if it was used by student directly.
 - Main equipment cord should have minimal slack so it won't be run over when moved.
 - Transducers should be wiped down PROPERLY including the cord. Transeptic should be used.
 - Gel bottles returned to gel warmer. If empty then file or replace with new bottles.
 - All trash should be in a receptacle. (paper gowns, stretcher covers, lead covers, handouts, etc.)
 - All dirty linens should be in hamper.
 - There is a linen closet. The drawers should only be use for extra towels and ONE extra sheet each, for ECHO and DMS.
 - Stretchers returned to lowest setting.
 - Stretcher linens should be folded and put in the drawer unless they need to be washed.
 - Glove boxes should be in the rack or drawer. If empty, dispose of box and replace.
 - Take note of equipment to make sure there is no gel or dust on the screen or console.
 - Wipe off foot rest if excessively dirty.
 - Remove any paper printer images.
 - Treat curtains with care. Do not be aggressive if they do not move smoothly. Gently pull open and close.
 - Remove papers from clip holder and put away.
3. If a STUDENT LAB ASSISTANT is required because of continuous class lab violations, the schedule is posted on the door. This student is responsible for the lab at the end of each session.
- Does not have to CLEAN the lab, just confirm that it has been done.
 - Delegate tasks that need to be completed.
 - Should be the last one to leave. Record if you have to call someone back to clean their area.
 - Findings by the Faculty from next lab session will be reported and the lab assistant will be held accountable.
4. ALL STUDENTS ARE REQUIRED TO PERFORM LAUNDRY DUTIES.
5. After hours students MUST sign in and out. You are responsible for cleaning the area used.
- Turn off lights

- Open all curtains
6. If any area needs to be cleaned, clean it. Dust on counters, gel rings, etc...
 7. NO FOOD OR DRINK PERMITTED in the scanning rooms.
 8. DO NOT eat while sitting on the stretchers or use the ergonomic scanning chairs for anything other than scanning.
 9. No CELL PHONES usage in the lab unless for educational purposes.

Violation Consequences: Accumulative violations (does not mean repetition of same violation)

1st violation: Written warning to individual student

2nd violation: Clean entire lab, top to bottom

3rd violation: Probation with possible program dismissal; Loss of any after-hours scanning privileges; Will have personal inspection after each lab session.

4.2 Lab Scanning Policies and Procedures

- 1) NEVER give any exam information or opinions, including preliminary or suspected findings to the volunteer patient.
- 2) Lab volunteers must sign the waiver every time they come to the lab.
- 3) Student must witness by signing the waiver.
- 4) Students must comply with the Clinical/Lab Dress Code.
- 5) No food or drink is allowed in the DMS Sonography Classroom/Lab area at any time.
- 6) Students are required to demonstrate professional conduct/composure during all scanning experiences.
- 7) It is a requirement that students participate in any and all activities assigned for a given lab session.
- 8) Student classroom/clinical sonography lab responsibilities:
 - a. preparation of the imaging station
 - b. careful, safe and ergonomic use of the furniture and equipment in the classroom/lab
 - c. providing appropriate care for volunteer before, during, and after the scan, following Standard Precautions.
 - d. cleaning the transducer, ultrasound unit, scan table and ancillary equipment after scanning and at the end of the lab session.
 - e. turning off the ultrasound unit and lights at the end of the lab session, as directed.
- 9) When a volunteer model is to be scanned, the student is responsible to:
 - a. provide the **DMS Volunteer Waiver Form** to read and sign.
 - i. Children are not allowed in the DMS Classroom/Lab without a guardian
 - ii. With parental permission children with no known medical problem may be scanned. The parent signs the waiver form.
 - b. All obstetric patients MUST have a signed GTC permission slip from their physician.
 - c. escort the volunteer to the scan area, explain the exam process, and obtain a brief medical history while ensuring HIPAA compliancy.
 - d. explain to the volunteer that technical information and scanning instructions will be given to the student during this scanning session.
 - e. only provide images to the volunteer under some circumstances determined by the faculty.

- f. **thank the volunteer** for his/her time and willingness to participate in the lab session.
- g. have volunteer report to faculty member to obtain their volunteer points as needed.

GTC DMS PROGRAM INFECTION CONTROL POLICY

Student Injuries/Exposure to Communicable Disease policies are outlined in the Diagnostic Medical Sonography program's student handbook. The program is committed to provide an environment for the safe conduct of its mission in education of sonography students and lab volunteers. This policy is designed to provide reasonable protection for students, faculty, and volunteers against the transmission of infectious diseases within the environment of the Diagnostic Medical Sonography lab. Students and volunteers are encouraged to review guidelines set forth by the Center for Disease Control and Occupational Safety and Health Administration for additional guidelines not covered within the scope of this policy.

Standard Precautions

Standard precautions (also known as universal precautions) shall be followed at all times in the sonography lab. The employment of standard precautions shall include, but is not limited to, the following:

- A. Hand hygiene
 - 1. Students shall use a minimum of an alcohol-based hand rub prior to and in between scan subjects. Alcohol-based rub should be used prior to and immediately after removing gloves.
 - 2. When hands are visibly soiled, students shall wash hands using soap and water for a minimum of 20 seconds.
- B. Personal protective equipment (PPE) (gloves, face masks, face shields)
 - 1. All students will wear gloves while practicing in the sonography lab.
 - 2. Since students will not be exposed to procedures that can generate a splash or spray of infectious fluids, the use of face masks and face shields will be employed on an as needed basis.
 - 3. All PPE **MUST** be removed prior to exiting the sonography lab
- C. Respiratory hygiene / cough etiquette
 - 1. Cover mouth/nose when coughing or sneezing
 - 2. Use and dispose of tissues
 - 3. Perform hand hygiene after hands have been in contact with respiratory secretions
- D. Clean and disinfect environmental surfaces
 - 1. All equipment (ultrasound machines, transducers, stretchers, etc.) shall be cleaned/disinfected after each use.
 - a. Equipment will be cleaned and disinfected according to manufacturer's instructions and only with approved disinfection products.
 - b. We usually use Transeptic or Protex spray to clean transducers.
 - c. Clean stretchers with disinfectant wipes.
 - d. Students must cover the stretcher and pillow with a sheet or exam table paper. Either should be change between every patient.
 - b. Students should wear prescribed gloves during all disinfection procedures.

References provide guidelines for protecting students, faculty, and volunteers against the acquisition

of infection while in the sonography lab:

www.cdc.gov

www.osha.gov

<https://www.cdc.gov/oralhealth/infectioncontrol/summary-infection-prevention-practices/standardprecautions.html>

4.3 Pathologic/Atypical Findings in the DMS Lab

1. If a non-emergent finding is discovered by the student and/or faculty, the faculty will provide information to the volunteer and recommend they contact their physician.
2. If an emergent finding is discovered by the student and/or faculty, faculty will call emergency services.

4.4 Pathologic/Atypical Findings in the DMS Lab: Obstetrics

1. If a significant finding is discovered by the student, it is reported to faculty and not the patient. Faculty will document the finding and the scan session is terminated as soon as possible. The instructor determines if the abnormality is life threatening to the mother or fetus. There exists the possibility of calling "911" immediately. Normally, representative images or a DVD are taken for the school's records and for the DMS Medical Advisor. The instructor leaves the scanning room and contacts the patient's physician to inform him of the suspected abnormality and the name of the volunteer's physician.
2. If the abnormal finding is determined by the instructor to be non-life threatening, the scan session will be terminated and the patient is dismissed as soon as representative paper images or a DVD are taken for the school's records. The DMS faculty contacts the patient's physician and describes the findings of the sonogram.
3. The faculty member completes a detailed description of the incident.

SECTION V: DIAGNOSTIC MEDICAL SONOGRAPHY CLINICAL EDUCATION

5.1 Overview

Clinical education is a vital element of the GTC DMS program encompassing a majority of the contact hours within the Program. There are five competency based clinical courses meaning each course has designated competencies that coincide with didactic education and are documented in the GTC DMS Clinical Notebook and TRAJECSYS clinical reporting system.

Sonographers continuously use critical thinking skills and possess thorough knowledge of anatomy and sonographic imaging protocols. They must decide which images to acquire while simultaneously adjusting technical parameters to insure an accurate, diagnostic examination. There are times when the sonographer is expected to go beyond the minimum protocol to provide a diagnostic study that reflects the true pathologic process.

Proficiency and competency in performing sonographic examinations is a continuous and cumulative process based on the consistent demonstration of accurate scanning skills. The DMS clinical courses are sequenced in order of psychomotor skills: from basic scanning techniques and patient interactions, to performance of partial exams with appropriate accuracy, to performance of complete exams with accuracy and in a specified time frame. Critical Competencies are required to ensure that the DMS student is prepared to enter the workplace as an entry-level sonographer and to eventually pass his/her registry examinations.

For complete information pertaining to GTC DMS clinical education, DMS Program students will be provided with the GTC DMS Clinical Notebook and a TRAJECSYS account during DMSO 1060. Each DMSO clinical course syllabi states the specific competencies and content outline.

5.2 Clinical Rotation Assignments

Students should recognize that clinical assignments are required by the Joint Review Committee on Education in Diagnostic Medical Sonography and that the assignments are to provide practical experience opportunities enabling the student to achieve required professional competencies. Students are guests at each clinical affiliate and should complement each affiliate's sonography department. All students must exhibit an attitude of maturity and responsibility toward their clinical assignment and experiences. Each clinical affiliate expects the student to provide high quality patient services, to attend regularly, to be punctual, and to work with initiative and enthusiasm. DMS students are expected to be an asset to the team and not simply focused on obtaining competency check-offs.

Clinical affiliates are located all over the Gwinnett but we do try to keep them within an hour's drive of Gwinnett Technical College. Planning clinical rotations is a difficult task and the clinical coordinator cannot consider mileage, financial situation, day care needs, etc. Diagnostic Medical Sonography students will be responsible for providing their own reliable transportation to and from clinical assignments. Information concerning department contact, clinical instructor, directions to the site, parking location, parking fees, student badges and other pertinent information will be provided. This information can also be found in the clinical affiliate notebooks located in the classroom.

Assignments can ONLY be changed by the Program Director or Clinical Coordinator. Clinical requests are NOT permitted by students. Clinical rotation calendars are provided to each student and affiliate at least 4 weeks in advance. It is the student's responsibility to check the scheduled assignment for the

correct place, dates, and hours. The schedule is subject to change. Every effort is made to secure clinical placements in which the student will have ample access to scanning opportunities. The GTC DMS faculty cannot control the type and volume of cases performed during student clinical hours. Excessively full schedules and staffing issues may prevent a sonography student from actively scanning patients. Clinical instructor's discretion determines the student participation level based on the student's proven technical skills and other justifiable factors.

5.3 Educational Equity

All students will have equitable access to challenging and meaningful learning and achievement in clinical assignments. In making clinical assignments, great care is taken to assure students are receiving equivalent opportunities at the various clinical affiliates. Rotation schedules are evaluated every semester to ensure this equity is maintained. The program does not assign clinical sites based on where a student lives, but strictly what each clinical affiliate has to offer, patient load, types of exams, and clinical environment. Faculty reviews the number of student exams as entered in TRAJESYS to assess educational equity and to help plan for future rotations.

5.4 Clinical Affiliate Requirements of the Student

Each clinical affiliate has their own specific requirements for DMS students to be permitted to perform clinical rotations at their facility. Students will be required to review materials pertaining to the affiliate in addition to their policies and procedures. There will be tests on the information and students will have to sign several documents stating that they understand and will abide by the policies and procedures of each clinical affiliate. The GTC DMS clinical coordinator will guide the students through this process during the first semester. All students are required to complete all of the GTC DMS clinical affiliate documents. The clinical coordinator will make sure that all student documentation is sent to the clinical affiliate. Students may periodically be required to participate in continuing orientation processes for certain clinical affiliates.

5.5 Background Check and Drug Screening

This component is a requirement mandated by the clinical affiliates. Successful completion of a criminal background check and drug screen is required in order to participate in the clinical education portion of the DMS program and must be satisfied before beginning clinical education.

Background checks will be honored for the duration of the student's participation in the 5 semester GTC DMS program. A break in the enrollment may require a new background check and drug screen.

Once accepted into the program, students will be given instructions as to how to complete this process. Students must use Advantage Students as directed by the DMS faculty. Students should not take it upon themselves to begin this process until directed by GTC DMS faculty. The process consists of an online information questionnaire submission. Once completed, the student will receive information from Advantage Students concerning the drug screening process. It is imperative that the student begin this process as soon as instructed due to the possibility of clinical education delays.

If there are any changes in this status post background check, it is the student's responsibility to immediately notify the DMS Program Director in writing of any subsequent changes in criminal history. Failure to do so may result in immediate withdrawal from the program.

Please note:

- GTC DMS faculty does not have access to student Background Checks or Drug Screens, only specified clinical affiliate representatives have access.

- Successful completion of a criminal background check for the DMS program does not ensure eligibility for licensure or future employment.
- If a student is found to be ineligible for clinical placement any time during the program, the student is unable to meet clinical learning objectives and will be withdrawn pending resolution of the situation.
- If there is something in a student's background that is of concern, the student may contact the ARDMS and request a review of the circumstances. There is a fee for this service but registry eligibility can be determined prior to beginning the sonography education.

5.6 Medical Screening and Vaccinations (This policy may be revised at any time.)

As healthcare professional students, it is highly recommended that you are vaccinated against infectious diseases encountered at clinical/practicum sites. We recommend you discuss these vaccinations with your personal physician.

Students are required to follow the medical clearance policies designated by their assigned clinical and/or practicum sites. Please be aware that some clinical/practicum sites mandate vaccinations against specific diseases such as COVID-19, influenza and/or testing for specific diseases such as tuberculosis. If you elect not to be vaccinated or tested, you will not be allowed to attend those clinical/practicum sites. If you do not have all required immunizations and tests, you will have limited access to clinical/practicum sites. This will delay or prevent program completion.

Although vaccines are not required for program admission, each clinical/practicum site reserves the right to deny a student entry based on their own policies and procedures. If a student is denied entry to a clinical/practicum site based on lack of vaccinations or testing, the student will not be able to complete the clinical/practicum course. As a result, successful completion of the program will not be possible.

This information is intended to give recommendations and not set specific policies on vaccinations and/or testing. Gwinnett Technical College, the Health Science division and the Technical College System of Georgia are not responsible for any adverse reactions that may occur as a result of vaccines and/or testing. Please see individual program materials for information regarding specific vaccine and testing requirements below.

Students will be required to complete a health history form for the DMS program and as part of orientation requirements for all of the clinical sites. The DMS health history form must be completed by a medical practitioner and students are required to document vaccination history/proof of positive immune titer for Measles, Mumps, Rubella, Tetanus, Varicella, COVID and Hepatitis B. While in the program, students must also have yearly documentation of an influenza vaccine as required by clinical affiliates. In addition, students must complete a yearly TB blood draw test to attend clinical rotations. If the TB test is positive, the student may be required to obtain additional testing such as a chest x-ray. Some clinical affiliates may have additional requirements. Students will be notified well in advance if they need additional immunizations.

5.7 Clinical Participation (Refer to DMS Professionalism Score in Section III)

Students are expected to **attend all clinical assignments** as scheduled by the Clinical Coordinator. Students are to clock in and out via Trajecsys upon arrival and departure each day of the rotation. The clinical coordinator monitors clock in/out times and locations. Failure to clock in or out will result in no clinical credit for that day. The total number of hours the student spends in their clinical assignment

will be entered on the student's record at the end of each semester. This number must match the required number of hours set by the Program Director for each clinical course. A major discrepancy could result in postponement of graduation.

Clinical Course	Required Clinical Hours
DMSO 1060 DMS Clinical Sonography I	176 (36 clinical prep)
DMSO 1101 DMS Clinical Sonography II	240
DMSO 1102 DMS Clinical Sonography II	64
DMSO 2031 DMS Clinical Sonography III	64
DMSO 2032 DMS Clinical Sonography III	336
DMSO 2050 DMS Clinical Sonography IV	480
Total Clinical Hours	1360*
*refer to comp time policy section 3.2	(1250 required)

Tardy/Absence from Clinical: Students must contact his/her clinical instructor at least 30 minutes prior to starting time when it appears that they will be tardy or absent. A tardy will be reflected on the time sheet. A student must stay at the clinical affiliate late that day to compensate for the missed time. If the student is over ten minutes late, an absence will be recorded for the first hour of the assignment. ***Refer to each Clinical Syllabus for the complete participation policy via the Professionalism heading.***

If the student is going to be **absent**, he/she MUST contact DMS faculty AND the clinical instructor at least 30 minutes prior to the scheduled assignment time. DMS faculty can be notified via telephone between the hours of 7:00 am and 8:00 pm and via email at other times. Any absence must be made up on the students own time, prior to the end of the semester. A clinical absence form must be turned in to the Program Director on the next class day with a plan to make up the missed clinical time.

Contact information for the clinical affiliates and DMS Faculty is provided in the student DMS Clinical Notebook. The student should leave an appropriate message on the voice mail system if no one is available to take the call at the affiliate. Students are required to contact the Program Director and their assigned clinical coordinator for the rotation. Faculty may be contacted via email, phone, or cell phone (at appropriate times).

Kim Strong; Program Director..... (O) 678-226-6701; (C) 706-224-1331

Kara Caldwell: Clinical Coordinator..... (O) 678-226-6679; (C) 706-614-5549

Cristina Migliore: Assistant Clinical Coordinator....(C) 678-925-7178

This policy is applicable at all times and calls must be made by the student himself or a responsible party. Failure to call in when absent or tardy will result in a reduction of the student's Professionalism category of the clinical grade. Clinical Instructors (CI) will notify the school if a student is absent and was not notified.

The GTC DMS program does not schedule days off from clinical unless the day is a Federal holiday in which the college is closed. Sometimes the Program Director will use a clinical day for testing purposes. These days will not have to be made up. There are no clinical absences built into the program. Students will not graduate unless they meet the required number of clinical hours. The GTC DMS faculty will review extenuating circumstances on a case by case basis.

Scheduled absenteeism (e.g. appointments, vacations, marriages, etc.) should be reserved for periods when classes are not in session.

5.8 Clinical Hours

The GTC DMS program does not follow a “banking of clinical hours” policy. Clinical hours are set and must be met as prescribed in each DMSO clinical course syllabus. Clinical assignment hours are from 8:00 a.m. to 4:30 p.m. with a half hour lunch, making clinical days 8 hours in duration. Some clinical affiliates may require that you adjust your clinical hours to 7 a.m. – 3:30 p.m. or other time frame due to their departmental hours of operation. Some clinical assignments may require students to attend second shift clinical hours.

Alterations to Clinical Schedule: There are times when extenuating circumstances arise at the clinical sites. If the clinical site requests that a student alter their day or time to be of assistance to the site or to provide more learning opportunities, the student must submit a written request (in person or via email) to the Program Director AND Clinical Coordinators before moving forward with alteration of clinical days and times.

5.9 Clinical Inclement Weather Policy

In the case of Inclement Weather, students should listen to 95.5 FM for area weather watches and warnings, school closings, etc... If the college closes due to inclement weather, DMS faculty will email students information and assignment instructions. Students will be held accountable for the information contained in the email unless there is proof of a power outage or internet interruption. Faculty is aware that our students live in various cities around the GTC campus. We are also aware that weather can affect cities within our area differently. Students are also at clinical affiliate locations that can be affected differently.

5.10 Personal Appearance

The personal appearance and demeanor of GTC Diagnostic Medical Sonography students reflects both the college and program standards and are indicative of the student's interest and pride in their profession. Any student reporting to their clinical rotation in improper (soiled, untidy, dirty shoes, etc.) uniform, will be sent home by the clinical supervisor, CI, or DMS faculty. The Professionalism demerit system will be used for improper attire issues (see course syllabus for details). The uniform dress code is mutually agreed upon by the program faculty, program advisory committee, and the clinical affiliates. DMS Students must have the GTC DMS embroidery on all scrub tops and jackets worn at clinical.

1. Physical Appearance:

- ◆ Clean, neat, and appropriate hairstyle. Hair, chin (angle of mandible) length or longer must be completely pulled back into a professional manner. Bangs must be clipped back so as not to interfere with daily duties.
- ◆ Fingernails will be short, neat, and clean and NATURAL. Nails are not to extend beyond the finger pads. Long and sculptured nails are breeding places for infectious microorganisms and are not acceptable. No colored polish can be used.
- ◆ Perfume and cologne are not to be worn, strong scents are offensive to patients &/or coworkers.
- ◆ Daily body cleanliness and appropriate deodorant or antiperspirant must be used.
- ◆ Men must be clean shaven or have a neatly trimmed beard &/or moustache.
- ◆ Tattoos and body piercings must not be visible while on clinical assignment.

2. Clinical Attire:

- ◆ GTC DMS scrubs are selected by the faculty (assigned by class) with same color warm up jacket. The program pays for the required GTC DMS embroidery on the first 3 scrub tops/jackets. White, gray, or black long sleeve t-shirts may be worn under the scrubs.
- ◆ Clean athletic shoes only, limited color variations. No high tops, open back, or clog-type shoes are allowed.
- ◆ Athletic type socks MUST be worn.
- ◆ Undergarments will not show through, over or under your uniform.
- ◆ All uniforms are to be clean and wrinkle free.
- ◆ Jewelry is dangerous to both the student and the patient. One ring (wedding band or class ring), and one watch may be worn. **One pair of earrings, not longer than the earlobe, one earring per each ear ONLY.** Any and all other body piercing or body jewelry **must not** be visible while on clinical assignment.

5.11 Liability Insurance

All students are required to purchase liability insurance through GTC in order to participate in clinical education. This insurance is purchased as part of registration for clinical courses and is assessed on a yearly basis so students will pay for it twice while in the DMS program. The insurance policy extends coverage only to experiences associated with the clinical education phase of the diagnostic medical sonography program. Thus, the policy does not cover the student in a private employment situation outside of the clinical assignments.

5.12 Student Injuries/Exposure to Communicable Disease

The program faculty or health science secretary should be notified immediately should any student, while on clinical assignment, suffer an injury which requires medical attention. Students are guests in each CEC and are therefore responsible for securing and financing any medical treatment required as a result of accidental injury on clinical assignment. The student must realize that although a CEC may offer or suggest that the student receive treatment within the facility, a bill for any and all services rendered may result.

For injuries or health problems during clinical assignments that require treatment but are not life threatening, the student should consider the following two options.

- A. Treatment from an independent physician and/or facility of the student's choice at a cost to the student.
- B. Treatment from the staff of the CEC, if offered, with subsequent billing for services rendered.

Accident insurance is available to students for purchase at a group rate. Applications and information are available in the GTC Business office.

Communicable Disease Policy

Student with a known communicable disease:

1. The student should report the illness to the program manager as soon as it is known. The student should not report to the clinical site until evaluated and cleared by a physician. In extreme cases, the student may be administratively withdrawn. Following physician clearance, the student will be reentered into the Program the following year at the place in the course sequence they were withdrawn.
2. Any student withholding information regarding a known communicable disease either

for the pre-admission physical or while enrolled in the DMS Program may be dismissed for unethical behavior.

3. The student maintains the right to appeal any decision through the grievance process.

Student exposure to Communicable Diseases:

The students should be aware that they will come in contact with patients who have communicable diseases in the clinical setting. Students will be taught universal precautions prior to beginning their clinical rotations. It is the student's responsibility to follow these precautions to avoid exposure. The student should refer to the Incident/Exposure Policy for reporting contaminated sharp stick or exposure to blood/body fluids.

Known exposure to TB:

Students must make sure their identification is documented on all studies they were involved in at the clinical site. If the hospital determines that a patient has TB, they will search through the patient's medical record to identify all caregivers that may have come in contact with the patient. The Infection Control Officer will identify any student(s) who may have been exposed and will notify the program manager. The student will be sent to the CTC Infection Control Coordinator for follow up PPD.

5.13 Clinical Performance

A. Clinical Instructors (CI) for the Diagnostic Medical Sonography program are identified for each clinical affiliate. **In order for a CI to sign any competency check-offs, they must be credentialed in that specific area.** The role of the CI is to manage, direct, and evaluate student learning experiences and imaging skills during the student's clinical rotation. Also, to serve as liaison between the affiliate and DMS faculty regarding the clinical aspect of the program.

Students should consult the CIs for:

- instruction and guidance
- evaluation of progress and skills
- demonstration of skills
- supervision in performance of procedures
- basic patient care
- emergency procedures of the clinical affiliate and department
- advisement regarding specific clinical incidents/problems

B. When an initial rotation at a clinical affiliate has begun, the student should report to the CI for orientation to the department and facility. This is done in order to inform the student of any policies, procedures, or routines unique to that department and/or facility. There is an orientation form REQUIRED to be completed for each rotation at each affiliate. This can be completed on Trajecsys or hard copy.

C. Students will be evaluated by the supervising technologist for imaging and technical skills, as well as on their professional development/work ethic traits. This evaluation grade will be incorporated into the student's clinical education grade.

D. Until a student achieves the program's required level of competency as shown by successful completion of the appropriate critical competencies (refer to course syllabus), all clinical

assignments should be carried out under the direct supervision of a qualified sonographer as defined by the following.

- 1 Student supervision by a qualified sonographer who reviews images in relation to the student's achievement, evaluates the condition of the patient in relation to the student's knowledge, *is present in the room during the exam*.
 - 2 Student supervision may consist of reviewing the images taken by the student but not included in the diagnostic exam prepared for the radiologist or physician.
 - 3 For a student who is performing with indirect supervision on those exams for which he/she has program approval (passing of benchmark evaluations), a qualified sonographer is to be available in the vicinity to assist and to review sonographic images.
- E. It is at the discretion of the clinical affiliate when they allow students to complete exams under indirect supervision.
- F. In the absence of the CI, students should interact with the person assuming the responsibilities of the CI or the supervising technologist. Each CI will identify the specific person to the students and faculty.
- G. In addition to complying with GTC policies, students must comply with the code and policies and procedures of the Clinical Affiliate to which they are assigned.
- H. Familiarize yourself with HIPAA rules and regulations as presented in each clinical affiliate's orientation packet. These must be followed at all clinical affiliate sites. Students are expected to maintain the confidentiality of a patient in a professional manner. All hospital and patient records are confidential in nature. All requests for such information should be referred to the CI or supervising technologist.

5.14 Conduct in Clinical Education Centers

The Diagnostic Medical Sonography program reserves the right to refuse admission and/or program continuation to any student who is involved in any activity considered unprofessional or not conducive to proper patient care. This list is not all inclusive. GTC DMS faculty reserves the right to proclaim misconduct as situations occur.

Misconduct is defined as; deliberate violation of a standard or improper behavior (Webster's); and is characterized by the following behaviors during clinical time:

1. Non alert condition.
2. Improper uniform.
3. Possession of drugs or alcohol.
4. Under the influence of drugs or alcohol.
5. Sleeping during clinical time
6. Theft from the CEC.
7. Improper conduct as defined by the CEC rules & regulations, the GTC Student Handbook, and the SDMS Code of Ethics (included in this document).
8. Smoking in prohibited areas.
9. Chewing gum in patient care areas.
10. Eating or drinking in prohibited areas.

11. Extended breaks or lunch times.
12. Excessive use of department telephones for personal use.
13. Refusing to do "given tasks" within the realm of capabilities or scope of practice.
14. Performing tasks that are "not within the realm" of capabilities or scope of practice.
15. Forgery/falsifying any record of participation or evaluation tool.
16. Acceptance of gratuities from a patient, patient's family, or physician.
17. Leaving patients unattended while under your care.
18. Leaving the assigned area or the affiliate without permission from the CI.
19. Use of personal electronic device while on duty.

Explicit Sonography Misconduct

1. Questioning the sonographer about any abnormality you might have observed in front of the patient.
2. Giving the patient results or your opinion of the examination.
3. Invading the CI's personal space. Ask for clarification on where they would like you to stand during observation.
4. Engaging in any kind of gossip or repeat gossip including that about other sonographers, affiliates, DMS faculty, fellow students, other sonography students or program students. (*Gossip- a conversation involving malicious chatter or rumors about other people.*)
5. Arguing with a CI when they are giving you constructive criticism. If you deem the criticism as anything else you should discuss the matter with DMS faculty. They will decide any interference on their part is necessary.

TIPS for success

1. Do not state to the CI that you were not taught to do something the way they are doing it or that you were not taught something. Simply learn from their experience. You should discuss any imaging differences with DMS faculty to ensure that all parties are using the same thought process. This is how the program can learn new protocols or physician imaging requests.
2. Do not hover when the schedule permits some down time. Ask for a task or find an area to study.
3. Do not ask to "friend" any CI on Facebook or other social network. You are a student and are not permitted to have social relationships with CIs at this time. If you are asked by a CI to join their social group, you must respectfully decline.
4. Do not make excuses when your technique or imaging is being critiqued. You should make a statement so the CI knows you heard them and understand what they were trying to explain to you. Remember that repetitive complaints can get you dismissed from the program.
5. Leave your baggage at the door. It is in your best interest to always "put on a happy face" and approach each clinical day with a positive attitude.

Reported Misconduct

Should any formal complaints be registered against a student regarding his/her conduct, the student shall be notified and consulted for clarification and possible resolution. Appropriate action will be taken depending on the severity of the incident. If the incident does not require immediate dismissal, a record will be maintained for each incident and their Professionalism score will reflect the misconduct. Upon receipt of the second formal complaint (regardless of topic) against any one student, that student will be placed on conduct probation. At the end of this designated time period, the student shall be re-evaluated for eligibility to continue in the program. Failure to

comply with any stipulation applied to the probation period constitutes ground for recommended dismissal.

5.15 Clinical Participation on “Days Off”

Clinical Education Policies dictate that students are to attend clinic as assigned by the clinical coordinator.

Section 5.2 Clinical Assignments: “Assignments cannot be changed without permission from the Clinical Coordinator.”

Section 5.6 – Clinical Participation: “Students will be required to attend all clinical assignments as scheduled by the Clinical Coordinator.”

Also Clinical Education Policies give some explanation of why program faculty must be in control of clinical assignments.

Section 5.10 – Liability Insurance: “The insurance policy extends coverage only to experiences associated with the clinical education phase of the DMS program. Thus, the policy does not cover the student in a private employment situation outside of the clinical assignments.”

Section 5.11 – Student Injuries: “The program or school office should be notified immediately should any student, while on clinical assignment, suffer an injury which requires medical attention.” ... “For injuries that expose the student to a possible infectious disease (e.g. needle stick) the program faculty must be notified immediately.”

The program’s design and clinical assignments will allow all students to achieve appropriate competency check-offs during the scheduled clinical times. However, program faculty understands that students may desire to gain additional clinical experience. The program neither encourages nor discourages students to attend clinic on unassigned days for this additional experience.

If a student desires to attend clinic on days that are not scheduled by the clinical coordinator that student must make their request in writing to either the clinical coordinator or program director. Verbal approval from the clinical affiliate should be sought prior to the inquiry with DMS faculty. The student may only request to spend this time at their current clinical assignment. The student must be registered and have paid for the next clinical course. Faculty will verify with the clinical instructor at the specific clinical site that the student is welcome during the requested time.

If the clinical instructor and clinical coordinator agree that this is an appropriate request the student will be allowed to be present at the clinical site and all clinical education policies must be followed. Also, appropriate time sheet documentation must be turned in to the clinical coordinator upon completion of requested time.

5.16 Responsibilities of Students during Clinical Rotations

- Arrive at the clinical site **ready to begin at the scheduled time** and dressed appropriately.
- **Challenge yourself** to learn the basic routine of the department. Refer to the schedules and **anticipate** the types of examinations to be performed.
- Be **assertive** in requesting time to scan a variety of patients within the clinical setting. Some days are very busy and sonographers must meet the needs of the patients and of the facility. Scanning on the busy days may not be possible, depending on your skills, but by paying attention to the sonographer, patient, and exam, students will absorb valuable information.
- **Scan time is a privilege and is earned by demonstrating confidence, knowledge of anatomy and protocols, and IMPORTANTLY imaging speed and accuracy.**

- **Try new types of examinations** when available, even if they are not yet assigned — scanning is a process that is learned by doing.
- **Never ask inappropriate questions** in front of a patient, such as pathology seen on the exam or related pathology, why a sonographer is performing an exam in a specific manner, or if the sonographer is following protocol. This type of behavior has been thoroughly discussed and role-played in classroom laboratories in the first semester of DMS instruction and will not be tolerated. This may be reported as a misconduct infraction.
- **Ask for assistance** from the clinical instructor when it is needed, being sensitive to the patient being scanned.
- **Never leave a patient unattended** that needs your attention. Both side rails of the stretcher must be at full height if the patient is left alone for any permissible reason.
- Ask for **review or critique of the sonographic images** with the clinical instructor at the end of an examination AFTER the patient has left the department. Exams can be reviewed at a later time, or when the DMS faculty is doing clinical site visits.
- **Accept constructive criticism as a learning tool** and adjust your skill accordingly.
- **NEVER release a patient before the sonographer has determined the examination is complete.**
- Take primary responsibility for mastery of the skills assigned within the *GTC DMS Clinical Notebook*.
- Act as a **team player** whenever you are in a clinical facility.
- **Remain calm under stressful situations.**
- **Review each clinical syllabus to make sure you are learning what is required.**
- What about “free” time?
- **BE POSITIVE!** Do not complain about the program, your grades, or other personal complaints.
- There will be periods of time while on-duty when there are no imaging procedures to be performed in the assigned room. Such so-called “free-time” should be used as follows:
 1. Take the initiative to see if someone else needs help in another room.
 2. Stock supplies wherever necessary.
 3. Clean the equipment as needed.
 4. Practice sonography skills with another student or staff member.
 5. Review studies on the ultrasound equipment or PACS system if permitted.
 6. Ask to review their teaching files.

5.17 Grading for Clinical Courses (subject to change, course syllabi will have detailed information)
Requirements and criteria weights vary by rotation.

Criteria
Clinical Placement Preparation
Clinical Affiliate Evaluation
Faculty Site Evaluations
DMS Clinical Records (Notebook and TRAJECSYS)
Benchmarks/ Scan Quizzes/ Portfolios/
DMS Faculty Midterm and Final Evals
Complete Exam Requirement
Level 5 Critical Comps specifically Abdomen-Extended *If not ready for Rot 6- reverts to rot 5 criteria *If ready but none completed, 80% grade given *If all completed prior and satisfactory, 95% given

5.18 Clinical Journal

As a junior, students will submit a weekly journal entry. Failure to submit entries or meet criteria will result in professionalism score demerits. These journals are private - only the student and DMS faculty will read the entries. Any concerns or challenges will be discussed. The purpose of these journals is to give the student and program a documented progression of their skill development and to provide communication with DMS faculty.

The following list is a guide to the data that should be provided in the journals. However, the student is not limited to just this list. Feel free to expand the information discussed.

Follow the criteria below:

- Name of the clinical site
- Week dates
- Postings should be about a page
- What did I learn this week?
- What did I do well this week?
- What challenges did I face this week?
- What have I learned from these challenges?
- What are my goals for next week?
- Unacceptable information – any departmental issues, personal issues of the patient and/or healthcare workers, any hospital business, or any disciplinary action that does not reflect on the student. Non-compliance of this criteria, handbook guidelines, or syllabus guidelines will result in professionalism score demerits.

5.19 Diagnostic Medical Sonography Clinical Reporting System

Trajecsys is being utilized by the GTC DMS program as our official clinical recording and reporting system. Students are provided paper documents if there assigned clinical affiliate opts not to use Trajecsys.

The documentation found in Trajecsys was designed by the Gwinnett Technical College DMS Program faculty in accordance with CAAHEP Standards and Guidelines. Completion of all the required documentation is considered a critical competency and a requirement for graduation from the GTC DMS Program.

Didactic and clinical education is concurrent in the DMS Program. There are eight (8) clinical education rotations within the DMS Program. Each rotation last approximately 8 weeks with two rotations during regular semesters and one rotation during summer semesters. DMS students are evaluated at the end of each rotation in both didactic and clinical progression. These evaluations are done via scheduled individual student conferences with DMS faculty.

*The purpose of the **clinical tracking** is to provide documentation of adequate and expected progression in the clinical component of your DMS education. The Trajecsys system is a formal record of your clinical progression and competency requirements. The information is the RESPONSIBILITY OF THE STUDENT.*

A. Attendance

1. **Students must sign in and out DAILY by logging into Trajecsys.** Lunch will also be tracked here. You should make every effort to take a lunch.
2. **The clinical coordinator reviews and approves** your time daily. This does not refer to time

discrepancies. Make sure you are seen so there isn't a question about your arrival/departure time.

3. **Clinical Participation is documented daily.** Students should be tracking type of exams, level of participation and supervision, scan time, and any pathology encountered. DO NOT record any patient identifiers.

6. Knobology worksheet is required at the beginning of a rotation for rotations 1-5. The worksheet will not be required if the operating system has been previously reviewed twice by the student. These should be completed and placed back in the DMS clinical notebook under the appropriate section. This can be completed via Trajecsys or on hard copy.

7. Affiliate Orientation forms are required for every rotation. These should be completed at the beginning of each rotation and placed back in the DMS clinical notebook under the appropriate section.

B. Level III Critical Competencies: Clinical Check-offs

These competencies are completed via Trajecsys. If there are any internet issues or site prefer, paper documentation is available.

Beginning rotation 1, certain competency requirements will be assigned. Only ARDMS credentialed clinical instructors in the specialty area may check-off on the AB or OB/GYN specific competencies. The purpose of these competencies is to demonstrate progression and eventual consistent performance of all of the key components of the required proficiency. Meeting the competency requirement each rotation is a component of the clinical grade.

1. The CI will circle to appropriate number in each proficiency area that reflects their rating of the students imaging performance. These areas are defined in your clinical notebook.
 - 1- Developing
 - 2- Acceptable
 - 3- Consistently Reproducible
2. The students decides when to ask for proficiency/competency check-offs.
 - a. Do not question the CI's rating of your performance.
 - b. Students should give themselves a couple of weeks to become oriented to the affiliates protocols and expectations prior to asking for check-offs.
 - c. Do not wait until the last days of the rotation to ask for check-offs. It is the student's, not the CI's, responsibility to make sure the check-offs are completed.
3. As the student strives to master the proficiencies to the level of performance necessary for accurate, safe, and effective scanning behavior of a **developing sonographer, supervision is DIRECT.**
4. Student progress from **Direct to Indirect Supervision** level as they prove their imaging and technical skills to the clinical affiliate CI's. The level at which students are permitted to participate is at the discretion of the clinical affiliate. Passing their Benchmarks assures the clinical affiliates that GTC DMS faculty attests that the student is ready for Indirect Supervision at their discretion.
 - a. Direct supervision- clinical instructor is always present during an exam.

Directly assist the student while scanning, either verbally or physically assisting with hand coordination and technique.

b. Indirect Supervision- clinical instructor may be present during the entire exam or part of the exam. The CI will always scan the patient before or after the student. The patient should not be dismissed until confirmation with the CI.

4. For AB-extended check offs, by the middle of the fourth (4th) semester, (end of rotation 5) the DMS student should have received a competency score of 3 in all required proficiency areas. This means the student can consistently complete entire examinations.

5. If a student is awarded a "3" in a competency during rotations 2 or 3, the student will be required to earn a score of "3" in each competency again during rotations 4 or 5. Once a score of "3" is achieved twice, the student has completed the competency and does not need to repeat the competency again. Students will track their progression on the competency tracking log in the clinical notebook.

6. If the student does not meet this criterion, he/she will be permitted to achieve that goal by the end of the 6th rotation which is also the end of the fourth semester. Having to complete the Level III requirement in rotation 6 does add time constraints for student to meet the Level III requirements. Once the Level III requirements have been met in rotation 6, the student may progress to Level V.

7. Optimal progression allows the student to begin the Level V Critical Competencies in Rotation 6. This will give the student 3 rotations to meet the requirements of this level.

8. When a student receives credit for a complete exam but does not fulfill the competency requirement for the content in the exam in a semester, there will be no leniency in the competency requirement. It will be deemed as incomplete and could result in a failing clinical grade.

10. Failure to meet Level III Critical Competency requirements by the end of rotation 6 will result in an "F" for that clinical course and immediate dismissal from the program.

C. Program Flexibility: DMS students work on specific assigned proficiencies in their own time-frame within the limits of the semester requirements. Completion of proficiencies and clinical competencies are designed to coincide with didactic instruction. Students must set his/her goals at an appropriate rate (accomplishing the semester requirements) to receive a passing grade.

Competencies or specific objectives within the proficiencies **not** required by the program are marked N/A in the appropriate spaces **by GTC faculty only**. Note that some competencies are covered in the classroom and textbook (example, prostate) but are not typically performed by the ultrasound departments in our area. **DMS students are responsible for the didactic education as well as theories of application, system settings, including appropriate transducer, Color, Doppler, and AIUM standard protocols.**

D. Master List of Competency Requirements

This can be found in your clinical notebook and on Trajecsys. GTC Clinical Coordinator or Program

Chair will review clinical requirements prior to the beginning of a clinical rotation. The student should develop a personal plan to complete the assigned tasks within the assigned clinical environment. Always refer to the Master Competency List when making your plan.

1. If the assigned competencies allow choices within a certain category of proficiencies, choose the specific proficiencies on which to concentrate early in the rotation period.
2. Review the performance objectives associated with the proficiencies assigned.
3. If you feel you are not obtaining check offs in a timely manner, meet with the Clinical Coordinator and review the progress documented in your *GTC DMS Clinical Notebook*. Ask for suggestions to insure optimal opportunities to achieve proficiencies.
4. Regularly review and self-assess your ability to meet all the competencies. Self-assessment and questioning is a necessary component of becoming a professional sonographer.
5. Discuss your self-assessments with the Clinical Instructor or DMS faculty and ask for assistance in mastering competencies with which you are having difficulty.
6. Work on additional skills or unassigned proficiencies as opportunities arise. Request full or partial assessment of these proficiencies from the Clinical Instructors as they are mastered (consistently reproducible).

E. Clinical Instructor Evaluation of the Student

At the conclusion of each rotation, the student sonographer will receive a performance evaluation from the qualified sonographer who supervised the student during the evaluation period. If there was more than one supervisor during the period, each supervisor may perform an independent performance evaluation. Question 9 and 10 of this evaluation are considered critical competencies and will warrant further investigation as to whether or not the student is progressing at the expected level. This is done via Trajecsyst. The CI will have their own login information.

The evaluation form and process will measure three aspects of learning:

1. Cognitive learning - refers to knowledge gained in the classroom through lecture and demonstrations of various concepts and to the background information needed to understand a concept. Usually, cognitive learning precedes the other two aspects of learning.
2. Psychomotor learning -hands-on learning. This occurs in the campus lab and in the clinical environment. Successful psychomotor learning usually requires a certain level of cognitive information.
3. Affective learning- involves attitudes, values, and feelings. Affective learning occurs in both the cognitive and psychomotor environments.

This student should remind your CI two weeks prior to the completion of the rotation. The CI will complete the evaluation in the TRAJECSYS system or on a hard copy if requested. The hard copy will be placed in a sealed envelope and the student will deliver it the DMS faculty, may be faxed or emailed. In some instances, DMS faculty may collect the evaluation forms. Students will sign the evaluation during their end of rotation conference with DMS faculty. When the student receives the evaluation form from the program faculty, the student should review the comments of the supervisor and discuss with faculty any items where a less than desirable response is evident so that any problem area can be corrected before the next evaluation.

F. Student Evaluations of the Clinical Affiliate: This form must be filled out completely at the end of each rotation. This is the student's opinion about the Clinical Affiliate as it relates to their clinical

experience. This should be completed via Trajecsys.

G. Student Self Evaluations: The purpose of this form is to confirm that the student is setting realistic goals and is progressing in presumed areas of weakness. It also serves to help faculty understand how the students feels about their own progression in the DMS program. This should be completed at the end of each semester (except for summer) via Trajecsys.

All documentation in Trajecsys is considered the responsibility of the student. Any inaccurate or falsified entries that are under the student's control will be considered cheating.

5.20 Benchmarks: Challenge of a Previous Passed Critical Competency

- A. During semesters 2-4, benchmarks will be incorporated into the student's clinical grade since these scanning tests are a direct reflection of their utilization of clinical time and imaging progression. Once all benchmarks have been passed, the student will receive a certificate that states they are progressing toward the graduate level in the program. At the Affiliate's discretion, they may be allowed to perform examinations under **Indirect Supervision**.
- B. **Challenge proficiency:** If the DMS faculty or Clinical Instructor observes less than entry-level performance of a previously approved competency, the supervising sonographer may challenge the proficiencies. All of the proficiencies for that competency must be met satisfactorily.
1. The student will be required to repeat the Benchmark Competency GTC DMS faculty at a clinical site or in the GTC DMS lab (to be determined by the DMS faculty).
 2. Failure to meet the level of competency required during this scan will result in failure of the repeated Benchmark. This would mean the student has not met the critical competency requirements and be dismissed from the program.

5.21 Level V- Critical Competencies

This level consists of student's performing diagnostic studies at their clinical site. If an exam does not pass with at least an 85%, the exam cannot count as a complete exam.

Abdomen-Extended/Pelvic Critical Competencies

Right Upper Quadrant, Complete AB, Renal, Thyroid, Pelvic TA, Endovaginal Pelvic

- A. Students will be required to scan a series of complete exams. These exams will be graded by GTC DMS faculty on site.
- B. The exams will be performed using the GTC DMS protocols unless special permission is granted to do otherwise.
- C. Mastery of the competencies is proven when the level of performance necessary for entry-level sonography is demonstrated. **Progression reflects Indirect Supervision advancing to Graduate Level.**
- D. The Level 5 Critical Competencies must be passed with a grade of 85 or better to graduate from the GTC DMS Program.
- E. If a Student does not pass the Level 5 Critical Competency the first time, he/she will be given a second opportunity with the highest possible score being a 70.
- F. Failure to pass the Critical Competency on the second attempt will result in failure of

the clinical course. As a result of the DMS program requirement to pass all critical competencies, the clinical course will have to be repeated or extended depending on how many Level % competencies are remaining.

Process for grading of Level 5 Competencies:

- DMS senior students will be informed two weeks ahead of time when they will be receiving a site visit.
- Students are visited at least twice, allowing ample time for students to complete the exams for faculty to grade.
- If a student is unable to get an exam completed during a schedule visit, they can request for a faculty member to return to their site.
- Faculty requests must be made a week in advance.

Level 5 OB Critical Competency consists of a series of clinical assessments (check offs) graded by their clinical instructor. This may be started during their second OB rotation and must be completed by the end of rotation 8. The student must receive all 2's and 3's on this critical competency.

Level 5 Breast Critical Competency - consists of a series of clinical assessments (check offs) graded by their clinical instructor. This may be started during their Breast rotation and must be completed by the end of rotation 8. The student must receive all 2's and 3's on this critical competency.

5.22 Complete Exam Requirement

During rotations 4-8, students will be required to scan an assigned number of complete exams as part of their clinical grade.

A. Complete Exam Clarification

- An exam that is scanned in its entirety following GTC DMS protocols or the affiliate's protocols.
- Students should have scanned at least 20 minutes, **making adequate progress through the protocol. Adequate progress will be at the clinical instructor's discretion but should have gotten through MAJORITY of the protocol. (Example: RUQ- student should have scanned the liver, GB including CBD, and pancreas. Maybe they didn't get through the entire kidney.)**
- The images acquired by the student do NOT have to be included in the exam read by the physician. The study can be pre or post scanning.
- The chart below shows the rotation requirements. It is subject to change.

Complete Exam Minimum Requirement	
Rotation 3	15
Rotation 4	35
Rotation 5	60
Rotation 6	75
Rotation 7	85
Rotation 8	100

Total	370
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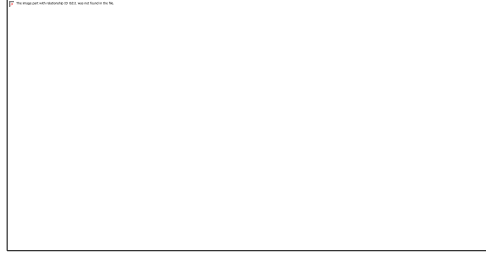
B. Beginning in rotation 5, if pathology is missed, the student cannot count the exam as a complete exam.

C. Final Semester/Rotations 7-8: Definition of Complete Exam

- An exam that is scanned in its entirety following GTC DMS protocols or the affiliate's protocols.
- The images acquired by the student do not have to be included in the exam read by the physician as not every sonographer is comfortable submitting student images- regardless of quality.
- Signing off on complete exams is at the discretion of the clinical instructor.

D. Additional Requirements

- Students must have at least 3 complete Scrotal exams by the end of rotation 8.
- Student clinical assignments are taken into account when analyzing the actual grade component for this criteria.
- DMS Faculty reserves the right to set complete exam requirements in terms of number and types of exams for individual students as progression is reviewed.
- There must be a diverse portrayal of complete exam experience.



**Diagnostic Medical
Sonography Student
Handbook
2022-2024**

Section 6: APPENDIX



6.1. Commission on Accreditation of Allied Health Education Programs Standards and Guidelines for the Accreditation of Educational Programs in Diagnostic Medical Sonography

These accreditation Standards and Guidelines are the minimum standards of quality used in accrediting programs that prepare individuals to enter the Diagnostic Medical Sonography profession. Standards are the minimum requirements to which an accredited program is held accountable. Guidelines are descriptions, examples, or recommendations that elaborate on the Standards. Guidelines are not required, but can assist with interpretation of the Standards.

The full document can be found at:

<https://caahep.org/CAAHEP/media/CAAHEP-Documents/DMSStandards.pdf>

6.2 JRCDSMS Educational Standards

The Joint Review Committee on Education in Diagnostic Medical Sonography (JRCDSMS) reviews the program's educational content and process based on nationally recognized educational STANDARDS. Program accreditation is required for students to be eligible to sit for the ARDMS registry examinations for national certification. The JRCDSMS National Education Curriculum can be found at this website: <http://jrcdms.org/nec.htm>

The NEC was developed collaboratively and endorsed by sonography-related organizations. Those organizations that have formally endorsed the NEC are identified with the "+" symbol. Supporting organizations are identified with the "*" symbol.

- American College of Cardiology (ACC)†
- American College of Obstetricians and Gynecologists (ACOG)*
- American College of Radiology (ACR)†
- American Institute of Ultrasound in Medicine (AIUM)*
- American Registry of Diagnostic Medical Sonography (ARDMS)*
- American Registry of Radiologic Technologists (ARRT)*
- American Society of Echocardiography (ASE)†
- American Society of Radiologic Technologists (ASRT)*
- Cardiovascular Credentialing International (CCI)†
- Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT)*
- Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS)†
- Society of Diagnostic Medical Sonography (SDMS)†
- Society of Radiologists in Ultrasound (SRU)†
- Society for Vascular Surgery (SVS)†
- Society for Vascular Ultrasound (SVU)†

6.3 GTC DMS Program Critical Competencies

DMS Critical Competencies: Lab and Clinical

<p>Level 1: LAB- Area of Interest Scan Quizzes Graded scans performed by the student on a patient of their choice. The scan quiz must be completed by a certain date and saved according to instructions. These critical competencies are graded based on anatomy, protocol, technical aspects (point in program considered), time and measurements. The student must pass all scan quizzes with a score of at least 70%.</p>	<p>DMSO 1020: aorta, liver, gallbladder, pancreas, kidneys, spleen DMSO 1070: pelvic, endovaginal pelvic (performed on simulator), endovaginal first trimester OB (performed on simulator) DMSO 1090: carotid, LEV DMSO 2010: 2nd/3rd trimester OB- scan assessed during 2nd week of the semester (or as soon as volunteer schedule permits) DMSO 2020: thyroid DMSO 2021: breast- breast phantom assignment</p>
<p>Level 2: LAB- BENCHMARKS Abdomen, Pelvic and Thyroid format: Performed on a specific date noted in the course syllabus. The student selects a random patient and performs the necessary patient interview. The student then performs the exam while a DMS faculty member watches. The student is assessed while scanning and the scan is reviewed immediately following completion. Feedback is given concerning the skill the student is performing well and in the areas that need improvement. The score is given at this time and both parties sign the score sheet. These level 2 critical competencies are graded on components of psychomotor (technical), cognitive (didactic) and affective (professional) skills. <i>The student must pass all level 2 critical competencies with a score of at least 70%.</i></p>	<p>DMSO 1050/1070: aorta, liver, gallbladder, pancreas, kidneys DMSO 2010: OB 2nd/3rd trimester- Area of Interest Scan Quiz completed at the end of semester 4 DMSO 2021 or DMSO 2020: Breast- assessed by the clinical instructor evaluation completed at the end of the students first breast rotation, specifically questions 9 and 10.</p>
<p>Level 3: CLINICAL- Check offs Students are assigned check-offs for every clinical rotation. They are given a Master Competency List located in the GTC DMS Clinical Notebook/Trajecsys. These are scored by a credentialed sonographer in that specific specialty (AB-Extended, OB/GYN, and Breast). The scoring is: 1- Developing 2- Acceptable 3- Consistently Reproducible Scoring for this critical competency will be based on the number of checkoffs that met the standard divided by the number or required checkoffs for that rotation. An 80% is required to meet the program standard.</p>	<p>DMSO 1101/1102/2031/2032 Abdomen-Extended and pelvic: student must earn all 3's in the required check-off's by the end of rotation 6. Student have access to Master Check Off list for each clinical site. DMSO 2032/2050 OB: student must earn the majority of 2-3's in the required check-off's at the end of their first OB. Meeting this standard will permit the student to begin their Level 5 critical competency at their next OB rotation. Should a student complete the Level 3 critical competency with a higher number of 1's than 2-3's, they will be required to meet the standard at their next OB rotation prior to beginning the Level 5 critical competency. This could result in program extension.</p>

<p>Level 3 cont'd</p>	<p>DMSO 1102/2031/2032/2050 Breast: student must earn the majority of 3's in the required check-off's by the end of rotation 8 or their last Breast clinical rotation. The student must have all check-offs assessed during each Breast rotation. The end result proves progression to all 2's and 3's.</p>
<p>Level 4: LAB- Organ System Benchmarks This level is performed in the same manner as the Level 2 critical competencies. Faculty attempts to recruit patients for these scans who are not classmates, but this does not always work out. The assessment criteria will change based on the point in the program. Time limits will also change. Benchmarks are graded on components of psychomotor (technical), cognitive (didactic) and affective (professional) skills at the level expected based on the point in the program. A passing score is a minimum of 75%.</p>	<p>Summer and Fall 2 Semesters RUQ, Complete AB, renal, thyroid, pelvic, endovaginal pelvic (performed on simulator), endovaginal first trimester OB (performed on simulator) and carotid. Fall 2 Semester 2nd/3rd trimester OB is in the form of the OB Portfolio assigned in DMSO 2010, due at the end of the semester. Spring 2 Semester Breast- is in the form of the Breast Phantom assignment performed during DMSO 2040 lab.</p>
<p>Level 5: CLINICAL- Complete Exams Students will be graded on complete exams performed at their clinical site. They must have completed the exam in its entirety. This exam is graded by GTC DMS faculty based on anatomy, technical skills, protocol, time, measurements, documentation of abnormal if indicated, and the diagnostic value of the study. Student must pass this level with each exam scoring at least 85%.</p>	<p>DMSO 2032/2050 Abdomen-Extended RUQ, Complete AB, Renal, Pelvic (TA and EV), Thyroid OB- a series of clinical assessments (check offs) graded by their clinical instructor. This may be started during their second OB rotation and must be completed by the graduation. The student must receive all 2's and 3's on this critical competency. Must score at least 80%. Breast- a series of clinical assessments (check offs) graded by their clinical instructor. This may be started during their second Breast rotation and must be completed by the graduation. The student must receive all 2's and 3's on this critical competency. Must score at least 80%.</p>

6.5 SDMS Clinical Standards for the Diagnostic Medical Sonographer April 13, 2015

DIAGNOSTIC MEDICAL SONOGRAPHY CLINICAL STANDARDS

Standards are designed to reflect behavior and performance levels expected in clinical practice for the diagnostic medical sonographer. These clinical standards set forth the principles that are common to all of the specialties within the larger category of the diagnostic sonography profession. Individual specialties or clinical areas may extend or refine, but not limit, these general principles according to their specific practice requirements.

SECTION 1

STANDARD: PATIENT INFORMATION ASSESSMENT AND EVALUATION:

1.1 Information regarding the patient's past and present health status is essential in providing appropriate diagnostic information. Therefore, pertinent data related to the diagnostic sonographic procedure should be collected and evaluated to determine its relevance to the examination.

The diagnostic medical sonographer:

- 1.1.1 Verifies patient identification and that the requested examination correlates with the patient's clinical history and presentation. In the event that the requested examination does not correlate, either the supervising physician or the referring physician will be notified.
- 1.1.2 In compliance with privacy and confidentiality standards, interviews the patient or their representative, and/or reviews the medical record to gather relevant information regarding the patient's medical history and current presenting indications for the study.
- 1.1.3 Evaluates any contraindications, insufficient patient preparation, and the patient's inability or unwillingness to tolerate the examination and associated procedures.

STANDARD: PATIENT EDUCATION AND COMMUNICATION:

1.2 Effective communication and education are necessary to establish a positive relationship with the patient or the patient's representative, and to elicit patient cooperation and understanding of expectations. The diagnostic medical sonographer:

- 1.2.1 Communicates with the patient in a manner appropriate to the patient's ability to understand. Presents explanations and instructions in a manner that can be easily understood by the patient and other healthcare providers.
- 1.2.2 Explains the examination and associated procedures to the patient and responds to patient questions and concerns.
- 1.2.3 Refers specific diagnostic, treatment, or prognosis questions to the appropriate physician or healthcare professional.

STANDARD: ANALYSIS AND DETERMINATION OF PROTOCOL FOR THE DIAGNOSTIC EXAMINATION:

1.3 The most appropriate protocol seeks to optimize patient safety and comfort, diagnostic quality, and efficient use of resources, while achieving the diagnostic objective of the examination.

The diagnostic medical sonographer:

- 1.3.1 Integrates medical history, previous studies, and current symptoms in determining the appropriate diagnostic protocol and tailoring the examination to the needs of the patient.
- 1.3.2 Performs the examination under appropriate supervision, as defined by the procedure.
- 1.3.3 Uses professional judgment to adapt the protocol and consults appropriate medical personnel, when

necessary, to optimize examination results.

- 1.3.4 Confers with the supervising physician, when appropriate, to determine if intravenous contrast is necessary to enhance image quality and obtain additional diagnostic information.
- 1.3.5 With appropriate education and training, uses proper technique for intravenous line insertion and administers intravenous contrast according to facility protocol.

STANDARD: IMPLEMENTATION OF THE PROTOCOL:

- 1.4 Quality patient care is provided through the safe and accurate implementation of a deliberate protocol. The diagnostic medical sonographer:
 - 1.4.1 Implements a protocol that falls within established procedures.
 - 1.4.2 Elicits the cooperation of the patient to carry out the protocol.
 - 1.4.3 Adapts the protocol according to the patient's disease process or condition.
- 1.4.4 Adapts the protocol, as required, according to the physical circumstances under which the examination must be performed (e.g., operating room, sonography laboratory, patient's bedside, emergency room, etc.).
 - 1.4.5 Monitors the patient's physical and mental status.
- 1.4.6 Adapts the protocol according to changes in the patient's clinical status during the examination.
 - 1.4.7 Administers first aid or provides life support in emergency situations.
 - 1.4.8 Performs basic patient care tasks, as needed.
- 1.4.9 Recognizes sonographic characteristics of normal and abnormal tissues, structures, and blood flow; adapts protocol as appropriate to further assess findings; adjusts scanning technique to optimize image quality and diagnostic information.
 - 1.4.10 Analyzes sonographic findings throughout the course of the examination so that a comprehensive examination is completed and sufficient data is provided to the supervising physician to direct patient management and render a final interpretation.
 - 1.4.11 Performs measurements and calculations according to facility protocol.

STANDARD: EVALUATION OF THE DIAGNOSTIC EXAMINATION RESULTS:

- 1.5 Careful evaluation of examination results in the context of the protocol is important to determine whether the goals have been met. The diagnostic medical sonographer:
 - 1.5.1 Establishes that the examination, as performed, complies with applicable protocols and guidelines.
 - 1.5.2 Identifies and documents any limitations to the examination.
- 1.5.3 Initiates additional scanning techniques or procedures (e.g., administering contrast agents) when indicated.
 - 1.5.4 Notifies supervising physician when immediate medical attention is necessary, based on examination findings and patient condition.

STANDARD: DOCUMENTATION:

- 1.6 Clear and precise documentation is necessary for continuity of care, accuracy of care, and quality assurance. The diagnostic medical sonographer:
 - 1.6.1 Provides timely, accurate, concise, and complete documentation.
 - 1.6.2 Provides an oral or written summary of findings to the supervising physician.

SECTION 2

STANDARD: IMPLEMENT QUALITY IMPROVEMENT PROGRAMS:

- 2.1 Participation in quality improvement programs is imperative. The diagnostic medical sonographer:
 - 2.1.1 Maintains a safe environment for patients and staff.
 - 2.1.2 Performs quality improvement procedures to determine that equipment operates at optimal levels and to promote patient safety.
 - 2.1.3 Participates in quality improvement programs that evaluate technical quality of images, completeness of examinations, and adherence to protocols.

2.1.4 Compares facility quality improvement standards to external metrics, such as accreditation criteria, evidence-based literature, or accepted guidelines.

STANDARD: QUALITY OF CARE:

2.2 All patients expect and deserve optimal care. The diagnostic medical sonographer:

2.2.1 Works in partnership with other healthcare professionals.

2.2.2 Reports adverse events.

SECTION 3

STANDARD: SELF-ASSESSMENT:

3.1 Self-assessment is an essential component in professional growth and development. Self-assessment involves evaluation of personal performance, knowledge, and skills.

3.1.1 Recognizes strengths and uses them to benefit patients, coworkers, and the profession.

3.1.2 Recognizes weaknesses and limitations and performs procedures only after receiving appropriate education and supervised clinical experience in any deficient areas.

STANDARD: EDUCATION:

3.2 Advancements in medical science and technology occur very rapidly, requiring an on-going commitment to professional education. The diagnostic medical sonographer:

3.2.1 Obtains and maintains appropriate professional certification/credential in areas of clinical practice.

3.2.2 Recognizes and takes advantage of opportunities for educational and professional growth.

STANDARD: COLLABORATION:

3.3 Quality patient care is provided when all members of the healthcare team communicate and collaborate efficiently. The diagnostic medical sonographer:

3.3.1 Promotes a positive and collaborative atmosphere with members of the healthcare team.

3.3.2 Communicates effectively with members of the healthcare team regarding the welfare of the patient.

3.3.3 Shares knowledge and expertise with colleagues, patients, students, and members of the healthcare team.

SECTION 4

STANDARD: ETHICS:

4.1 All decisions made and actions taken on behalf of the patient adhere to ethical standards. The diagnostic medical sonographer:

4.1.1 Adheres to accepted professional ethical standards.

4.1.2 Is accountable for professional judgments and decisions.

4.1.3 Provides patient care with equal respect for all.

4.1.4 Respects and promotes patient rights, provides patient care with respect for patient dignity and needs, and acts as a patient advocate.

4.1.5 Does not perform sonographic procedures without a medical indication, except in educational activities.

4.1.6 Adheres to this scope of practice and other related professional documents.