DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM
STUDENT HANDBOOK
2015 - 2016

Name________________________________________

GCC Student Handbook Supplement
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**ACADEMIC CALENDAR 2015-2016**

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<td>Affiliate and Program Orientations</td>
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<td>August 31</td>
<td>First Day of Classes, Fall Clinical Begins</td>
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<td>September 4</td>
<td>Last Day to Add Classes (until 4:00PM)</td>
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<td>September 7</td>
<td>Labor Day (College Closed)</td>
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<tr>
<td>October 23</td>
<td>Mid-Term Deficiency Reports Due from Faculty</td>
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<td>November 6</td>
<td>Last Day to Make Up Incomplete Grades from Spring 2015</td>
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<td>November 13</td>
<td>Last Day to Withdraw from Individual Classes</td>
</tr>
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<td>November 25</td>
<td>Faculty Planning Day, No Classes or Clinical</td>
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<tr>
<td>November 26-29</td>
<td>Thanksgiving Recess, No Classes or Clinical</td>
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<td>December 8</td>
<td>Reading Day, No Classes or Clinical</td>
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<td>December 11</td>
<td>Last Day of Classes</td>
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<tr>
<td>December 12-18</td>
<td>Final Examinations, No Clinical</td>
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<td>December 19-27</td>
<td>Christmas Break, No Clinical</td>
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<td>December 21</td>
<td>Last Day to Submit Final Grades (By 12:00 Noon)</td>
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<td>December 23</td>
<td>Semester Ends</td>
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### Spring 2016

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<td>Winter Clinical Internship Begins M-F, 40hrs per week</td>
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<td>December 31-January 1</td>
<td>New Year (College Closed) No Clinical</td>
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<td>January 15</td>
<td>Last Day of Winter Clinical Internship</td>
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<td>January 18</td>
<td>Martin Luther King Day (College Closed), No Clinical</td>
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<td>Professional Day, No Classes or Clinical</td>
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<td>January 28</td>
<td>Last Day to Add Classes (Until 4:00PM)</td>
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<td>February 12-15</td>
<td>President’s Day Recess (College Closed), No Clinical</td>
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<td>March 11</td>
<td>Mid-Term Deficiency Reports Due from Faculty</td>
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<td>March 21-27</td>
<td>Spring Recess, No Classes or Clinical</td>
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<td>April 1</td>
<td>Last Day to Make Up Incomplete Grades from Fall 2015</td>
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<td>April 8</td>
<td>Last Day to Withdraw from Individual Classes</td>
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<td>May 5</td>
<td>Reading Day, No Classes or Clinical</td>
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<td>May 9</td>
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*All dates are subject to change*
ORGANIZATIONAL CHART

Dorsey Kendrick PhD
President

Mark Kosinski, PhD
Dean of Academic Affairs

Sheila Solernou, MSN
Director of Allied Health & Nursing

Cara Case BS
RDCS, RDMS
Program Director

Kimberly Sorrentino
MS, RDCS, RDMS, RVT
Clinical Coordinator

Christy Cassella
Melissa Civitelli
Clinical EA
Diagnostic Medical Sonography Program Student Handbook 2015-2016

Diagnostic Medical Sonography students are responsible for reading and complying with the information which appears in the current GCC Catalog and the GCC Student Handbook, the Diagnostic Medical Sonography Program Student Handbook, the Affiliates’ code of conduct and department policies, and the Code of Ethics of the pertinent professional organizations (ARDMS and ARRT). It is the intent of this handbook to ensure patient safety and professional, ethical, and legal conduct of all Diagnostic Medical Sonography Program students. Failure to comply with College and Diagnostic Medical Sonography Program policies will lead to a review of student behavior and possible disciplinary action, including dismissal from the Diagnostic Medical Sonography Program.

The Diagnostic Medical Sonography Program reserves the right to modify any statement in the handbook. Changes will be given to students through a DMS Student Handbook Addendum.

Diagnostic Medical Sonography Program Student Handbook Acknowledgement of Receipt and Agreement to Comply
I, _________________________________, acknowledge receiving and reading the 2015-2016 Gateway Community College Diagnostic Medical Sonography Program Student Handbook. I have read the standards and procedures of the DMS Program. I also have read the clinical objectives and evaluation process that will be used to assess my clinical training and clinical competency. I agree to comply with the policies and standards stated within this handbook, and with the terms of the confidentiality agreement and consent to video recording.

I acknowledge that prior to signing I have been provided the opportunity to seek further clarification.

I understand that this statement will be placed in my Diagnostic Medical Sonography Program student record.

Student Name (Printed): _________________________________

Banner ID Number: _________________________________

Signature: _________________________________

Date: _______________________________
CONFIDENTIALITY AGREEMENT AND CONSENT TO VIDEO RECORD

During your participation in simulated clinical experience scenarios (SCES) while a student in the Gateway Community College Diagnostic Medical Sonography Program (GCC-DMS) you will be both an active participant and an observer.

The primary objectives of the SCES are to support and enhance your clinical learning while a student in the DMS Program. The faculty believes that these experiences will provide you with an additional method to identify your learning needs and to improve your performance. SCES are designed to challenge your response and judgment in a variety of clinical situations. Due to the possible sensitive nature of any SCES as well as to maintain optimal simulation experiences for all learners, strict confidentiality regarding the specific scenarios, including what occurred during the simulation experience, is required by all participants and observers.

By signing this agreement, you agree to maintain strict confidentiality regarding the specific scenarios, and both your performance and the performance of others, whether seen in real time, on video or otherwise communicated to you as part of the SCES. You will be discussing the scenarios during debriefing, with the understanding that, “All that takes place in the simulation environment – stays in the simulation environment!”

Each student is asked to agree to the following conditions:

My signature on the Diagnostic Medical Sonography Program Acknowledgement of Receipt and Agreement to Comply indicates my agreement to maintain strict confidentiality about the details of any SCES, its participant(s), and the performance of any participant(s). In addition, my signature indicates that I have authorized the GCC-DMS faculty and staff to video record my performance during SCES as a participant or as an observer. Furthermore, my signature indicates that I have authorized the GCC-DMS faculty and staff to use the video recording(s) of my participation in SCES for purposes including, but not limited to: debriefing me, faculty review and the educational support of other learners by displaying the recording.

By signing the Diagnostic Medical Sonography Program Student Handbook Acknowledgement of Receipt and Agreement to Comply, I acknowledge that my agreement is truly voluntary and that I have been provided the opportunity to seek further clarification of this document prior to signing.
STUDENT STATEMENT OF RESPONSIBILITY- ACADEMIC ADJUSTMENT

Students with a Diagnosed Disability must self-disclose and provide appropriate documentation to the Learning Disabilities Specialist. This process must be done thirty (30) days prior to the beginning of the semester. A request should be made every semester if the student requires reasonable accommodations.

For more information contact Ron Chomicz, Learning Disability Specialist, at 203-285-2234 or email atrchomicz@gatewayct.edu. The Student Disabilities Services office is located in Room S202, second floor of the South Building.

Please see the GCC Policy regarding requesting academic adjustments at http://www.gatewayct.edu/Offices-Departments/Students-Disability-Services/Requesting-Academic-Adjustments

I acknowledge that I have received written directions on the procedures for requesting academic adjustments, including when and to whom to make the request.

____________________________________
Student Name (Please Print)

____________________________________
Student Signature Date
Clinical lab is designed to expose students to scanning techniques, planes of the body, and normal structures within the body. In order to accomplish this, students are encouraged to participate as both the scanner and the scanned (a student ‘patient’). Fellow students and instructors will be positioning the student ‘patient’ and scanning them with an external transducer in areas such as the abdomen, neck, arm, etc. Internal and/or private area sonograms are not performed on students during in-school clinical labs. Students are required to participate in clinical lab as a scanner; however, participation as a student ‘patient’ is not mandatory. Non-participation as a student ‘patient’ will not affect a student’s grade. A student who does not wish to be scanned needs to inform the faculty in advance so that alternate arrangements can be made ahead of time.

Incidental pathology may be revealed during scanning practice. The DMS program and GWCC are not responsible for incidental pathology, medical diagnosis, and/or treatment. These exams are NOT diagnostic exams and do NOT take the place of appropriate medical diagnosis and treatment with the student’s healthcare provider.

My signature below signifies that I have read and understand the clinical lab release form.

Student signature: ________________________________

Printed student name: ________________________________

Date: ________________________________
PROGRAM INFORMATION

Introduction

The Gateway Community College Diagnostic Medical Sonography Program Student Handbook contains the program specific procedures in effect for the 2015-2016 academic year. It is the student’s responsibility to become familiar with the content of this handbook. This handbook is a supplement to the Gateway Community College Student Handbook. The student will be held accountable for meeting the expectations outlined in this Diagnostic Medical Program Student Handbook, the College Catalog, and the College Student Handbook. The Diagnostic Medical Sonography Program reserves the right to modify any information contained in this handbook. All approved changes will be made known to the students through a Diagnostic Medical Sonography Program Student Handbook Addendum. This handbook is not intended to cover all topics and circumstances. The Program reserves the right to respond to specific situations in a manner that best suits the needs of the Program and the student(s) involved, and most closely follows our stated policies.

Statement of Non-Discrimination

The Diagnostic Medical Sonography Program follows the non-discrimination statement of Gateway Community College which can be found in the Gateway Community College Student Handbook.

Diagnostic Medical Sonography: Associate in Science Degree

The Diagnostic Medical Sonography curriculum is designed to prepare students for employment as an entry-level sonographer in hospitals, clinics, private offices and other facilities where diagnostic imaging is available. The program is based on approximately twenty-four months of full-time study. The structure of the curriculum is designed to include didactic and supervised clinical education to assure sufficient opportunity for the student to achieve all didactic and clinical requirements. Students are expected to rotate through all clinical education centers, and assignments are done in a random fashion. Clinical rotation schedules are specifically designed to offer all student equitable clinical education and provide them with the opportunity to complete clinical objectives and competencies in order to meet program requirements for graduation. The purpose of the clinical practicum in the Program is two-fold. First the student will learn to perform all procedures and patient interaction skills. Second the clinical practicum will provide an opportunity for the student to develop the critical thinking skills and professionalism necessary to manage the responsibilities he/she will encounter as a registered Diagnostic Medical sonographer and employee. The Student is expected to treat the clinical practicum as if it were a job. The student’s technical skills and professionalism will be evaluated by clinical instructors, evaluators, and Program faculty through observation of performance in clinical areas as well as the Program facilities. The habits the student develops during the time spent in the program are habits that will
follow the student in the future as an employed sonographer. Remember, this is the beginning of an unofficial two-year interview with the clinical affiliates.

**Diagnostic Medical Sonography Program Mission Statement**

The DMS Program at Gateway Community College is committed to educating and preparing competent entry-level sonographers who can provide high quality imaging and patient care to members of the community. Furthermore, the Program is dedicated to providing tools to support lifelong learning.

**Diagnostic Medical Sonography Program Goals and Outcomes**

The following Diagnostic Medical Sonography Program goals have been established to realize this mission:

1. Students will demonstrate skills in effective oral and written communication  
   a. Students will apply effective verbal communication skills with sonographers and patients.  
   b. Students will utilize effective written communication with sonographers.
2. Students will demonstrate skills in critical thinking and problem solving principles and practices of Sonography  
   a. Evaluate and assess patient requisition in order to perform proper Sonographic procedures.
3. Students will demonstrate clinical competence in the practice of Sonography  
   a. Student will utilize patient care and comfort skills  
   b. Students will detect normal anatomy and pathology on sonographic images  
   c. Students will provide a safe environment for patients, and adhere to ALARA principle
4. The Program will prepare competent entry-level sonographers.  
   a. Maintain high values congruent with the Professional Code of conduct and the Scope of Practice while adhering to national, institutional and/or departmental standards, and procedures regarding imaging and patient care.
5. Students will achieve personal and professional growth.  
   a. Analyze professional publications  
   b. Utilize professional web sites.

Upon successful completion of all Program requirements, graduates will be eligible to take the Diagnostic Medical Sonography Registries offered by the ARDMS and the ARRT.

Goals are assessed by measuring the following student outcomes: Course completion, Clinical competencies, Program completion, National certification pass rate, and employment rate as well as graduate and employer satisfaction surveys.
PROGRAM CONTACT INFORMATION

Cara Case, BS, RDMS, RDCS Program Director/Assistant Professor
Office: S405H - Phone: (203) 285-2383 - Email: ccase@gatewayct.edu

Kimberly Sorrentino, MS, RDMS, RDCS, RVT Clinical Coordinator/Assistant Professor
Office: S405J - Phone: (203) 285-2506 - Email: ksorrentino@gatewayct.edu

Lynn Roller BS, RDMS, RT (R), (M), (CT) DMS/DL Faculty/Professor Diagnostic Medical Sonography
Office: N313A - Phone: (203) 285-2295 - Email: lroller@gatewayct.edu

CLINICAL AFFILIATE CONTACT INFORMATION

Bridgeport Hospital
267 Grant Street, Bridgeport, CT
Diagnostic Imaging Contact: John Magee Phone: (203)384-3003
Antenatal Center Contact: Tara Amarante Phone: (203)384-4723

Connecticut Children’s Medical Center
282 Washington Street, Hartford, CT
Contact: Christine Filanda Phone: (860)545-9120

Connecticut Vascular Center P.C.
280 State Street, North Haven, CT
Contact: Kim Coppola Phone: (203)288-2886
6 Business Park Road, Suite 204, Branford, CT Phone: (203) 483-8053

County Obstetrics and Gynecology
46 Prince Street, Suite 401, New Haven, CT
Contact: Lisa Bevins Phone: (203)777-2022
687 Main Street, Branford, CT Phone: (203)488-7712

Griffin Hospital
130 Division Street, Derby, CT
Contacts: Kristi Popescu Phone: (203)732-7270

Hammers Healthcare Imaging
2 Church St South, New Haven, CT
Contact: Steve Boucher Phone: (203) 773-8959

Lawrence & Memorial Hospital
365 Montauk Ave, New London, CT
Contact: Stacy Riley Phone: (860)444-5170
L&M Crossroads 196 Parkway South, Suite 102, Waterford, CT
L&M Pequot 52 Hazelnut Hill Rd, Groton, CT
**CLINICAL AFFILIATE CONTACT INFORMATION (continued)**

**Middlesex Hospital**  
28 Crescent Street, Middletown, CT  
Contact: Melanie Caruso  
Phone: (860)344-6526

260 Westbrook Rd, Essex, CT  
Contact: Patty Bishop  
Phone: (860)358-3805

**Milford Hospital**  
300 Seaside Ave, Milford, CT  
Contact: Tony Hrenyo  
Phone: (203)876 4250

**Norwalk Hospital**  
34 Maple Street, Norwalk, CT  
Contact: Alan Iovino  
Phone: (203)852-2179

**St. Francis Hospital**  
114 Woodland Street, Hartford, CT  
Contact: Angela Burnham  
Phone: (860)714-4076

**VA Connecticut Healthcare System**  
950 Campbell Avenue, West Haven, CT  
Contact: Bonnie Henson  
Phone: (203)932-5711  
Ext 5596

**The Vascular Experts**  
540 Saybrook Road, Middletown, CT  
Contact: Stephanie DeFilippo  
Phone (860) 740-2283

**Waterbury Hospital**  
64 Robbins Road, Waterbury, CT  
Contact: Ernesto Cerdena  
Phone: (203)573-6239

**William Backus Hospital**  
326 Washington Street, Norwich, CT  
Contact: Marion Owens  
Phone: (860)889-8331  
Ext 4497

**Yale New Haven Healthcare**  
Temple Medical Center Campus, 40 Temple Street, Suite 4B New Haven, CT  
Contact: Christy Casella  
Phone: (203)688-2092

**St. Raphael Campus**  
1450 Chapel Street, New Haven, CT  
Contact: Kyle Salerno  
Phone: (203)789-3804
PROGRAM STANDARDS

Student Code of Conduct

DMS students are entering a profession that requires academic honesty and integrity. The discipline of Sonography requires assumption of personal responsibility and ethical behavior in all settings, in keeping with the Code of Ethics for the Profession of Diagnostic Medical Sonography approved by SDMS (Appendix B). Students are expected to abide by these standards of professional behavior and clinical practice at all times. Any violation of conduct will be dealt with according to the Standards outlined in this Program Handbook, the College Student Handbook located on the College website (www.gatewayct.edu), and the standard manual of the Board of Regents of the Connecticut Community-Technical Colleges available at: http://www.commnet.edu/Board-Docs/BPM_COMPLETE_Master.pdf (CSCU) affiliates’ code of conduct and department standards.

DMS Program students are guests of the clinical affiliates. As guests, students are required to adhere to the clinical affiliates’ standards as if they were employees of the clinical affiliates. Behavior that interferes with the operations of the College, Program or clinical affiliate, violates established standards and/or procedures, discredits the Program or is offensive to patients, visitors, Program staff, clinical staff or fellow students will not be tolerated. Appropriate action will be taken and will follow the program disciplinary procedure.

The use of cell phones/smartphones/blackberries/recording devices/cameras or any electronic devices is not permitted in the clinical area, College laboratory or classroom. Students are prohibited from using the clinical site computers for non-Program purposes. The use of these devices or inappropriate use of these devices will subject the student to disciplinary action per program standard.

DMS students are reminded that posts to any and all social networking or social media (including personal Facebook, Twitter, personal blogs, and other types of social media accounts) must reflect the same standards of honesty, respect, consideration, confidentiality, and professionalism that are expected in college and clinical environments. In any social media posts or communications, students must adhere to the same restrictions related to privacy for fellow students, faculty, and patients. This also applies in the classroom or clinical environment in accordance with federal Health Insurance Portability and Accountability Act (HIPAA) standards. Inappropriate use of social media by users with regard to the college, its faculty, students, clinical affiliates, or patients is subject to disciplinary actions.

The DMS Diagnostic Medical Sonography Program is an Allied Healthcare Program and involves classroom and clinical discussions. All classroom discussions should be treated in
accordance with the same HIPAA standards as in the clinical sites. Violation of this classroom standard is subject to disciplinary actions.

A student’s written work is expected to be original and done independently unless otherwise indicated. Footnotes and references must be used to acknowledge the source and avoid plagiarism in accordance with the American Psychological Association (APA) format. Selected portions of the DMS curriculum are taught, reinforced, or reviewed through the use of educational software/instructional media such as videotapes, computer software programs, DVDs, and/or online learning activities.

**Program Disciplinary Standards**

The Program disciplinary procedures may be initiated upon receipt by the Program Director of behavior or action in violation of Program standards. The report of violation may be provided by the following means; written evaluation, verbal report from clinical affiliate staff, clinical observation by College faculty/staff, written and/or verbal comment from clinical affiliate. Other violations may pertain to daily clinical performance log and/or online clinical attendance record. This is not an all-inclusive list. Other mechanisms not listed here may be used to begin disciplinary procedures.

Sanctions are generally progressive in nature and proportionate to the behavior in question. Grievous violations, therefore, may result in immediate dismissal. The prior conduct record of a student shall be considered in determining the appropriate sanction for a student who has been found to have violated any program standards.

In such cases where the continued presence of a student in the clinical setting constitutes a danger to the health and safety of patients and/or staff, the clinical affiliate may temporarily or permanently remove a student from their site and refer the student immediately to the Program Director. Students in the Diagnostic Medical Sonography program are expected to rotate through all clinical sites. A student who is permanently removed from a clinical affiliate will be immediately dismissed from the Program and will be ineligible for re-admission to the DMS Program at any time in the future. The Program Director may also recommend to the College’s Dean of Students that the reported behavior of the student be addressed under the Student Conduct policy outlined in the College Student Handbook, which may lead to the student’s suspension or expulsion from the College.
Disciplinary Sanctions

Disciplinary sanctions may be imposed upon finding that a violation of the Program rules of student behavior has occurred. The sanctions are as follows:

1. Documented verbal warning
2. Disciplinary written warning
3. Clinical/Academic disciplinary probation
4. Programmatic dismissal

Disciplinary Procedures

The following procedures shall govern the enforcement of the Program Disciplinary Policy:

- Upon receipt of the report of a violation by a student, the Program Director may immediately impose restrictions on or suspend a student from the clinical setting on an interim basis if, in the judgment of the Program Director, the continued presence of the student at the clinical setting poses a danger or disrupts the academic process.
- The Program Director will provide the student an opportunity to meet within (3) working days of the reported violation. The student will then have an opportunity to submit any relevant information regarding the violation to the Program Director within (3) working days after said meeting.
- The Program Director will review and investigate the allegations and supporting documentation, and render a decision within (5) working days of meeting with the student. During the investigation period, the student may be placed on temporary suspension from the clinical obligations of the Program. The decision of the Program Director as to whether the student committed the reported violation and the appropriate sanction is final.
- If the student is not satisfied with the resolution, the student may bring the concern to the Allied Health/Nursing Division Director within (5) working days of receiving the decision. The Allied Health/Nursing Division Director will respond in writing within (5) working days of the receipt of the appeal.
- If the student is not satisfied with the decision of the Allied Health/Nursing Division Director, the student can initiate the college Student Grievance Procedure as outlined in the College Student Handbook.
Student exhibiting behavior, physical or emotional conditions in the clinical teaching/learning setting will be managed in accordance with this procedure. The Diagnostic Medical Sonography Program Director and/or Clinical Coordinator, faculty may recommend if expertise of additional college personnel, healthcare professional or administrators is needed. If the physical or emotional condition of the student is disability related, and an *Academic Adjustment* has been granted by the college *Disability Services Coordinator* and the clinical agency, then faculty must consult with the college *Disability Services Coordinator* prior to making further determination. The actions of faculty are sanctioned based upon the overarching requirement to protect the student(s) and/or client(s), patients, other students, and/or agency employees with whom they carry responsibility for delivering safe and competent radiation practices.

The dismissal of a student from any classroom or lab beyond one day (interim suspension), must be made in collaboration with the designated Diagnostic Medical Sonography Program Director and the Dean of Student Services for the College. The faculty/staff will follow college process.

**Standards of Program Progression**

The Diagnostic Medical Sonography program of study is sequential in nature. Students must meet all course requirements in order to progress to the next course. All DMS and co-requisite courses must be taken in the prescribed order according to the program of study. Students must maintain a minimum grade of C in each and all math and science courses. The student is required to pass all program course final exams with a grade of 75 or higher and maintain a minimum grade of 75 in all program specific courses. A student whose grades fall below the minimum requirement will be dismissed from the Program. Dismissed students, who wish to seek readmission, must comply with the Readmission procedure. Please note, if a student is granted readmission he/she will be required to repeat any course(s) where the grade did not meet the minimum requirement.
### Grading

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### Review of Academic Standing (Appeal of grade)

The Diagnostic Medical Sonography Program follows the College Review of Academic Standing (Appeal of Grade) procedure of Gateway Community College which can be found in the Gateway Community College Student Handbook.
Completion of the Program - Pinning and Graduation

A student official completes the DMS Program on the day of the GCC Commencement Ceremonies. In addition to the College’s general requirements for graduation, students of the DMS Program must have completed all math and science courses with a C or better and Program specific courses with numerical grade of 75% or better.

Students must successfully complete all the required clinical competencies. The students must not owe any clinical time; if the student owes time, he/she must make up the time prior to published graduation date in order to complete the Program.

All clinical documentation and ID badges must be returned to the clinical affiliate or Clinical Coordinator prior to commencement. Students who have not met all Program requirements for graduation may not be allowed to participate in the Pinning Ceremony, or be considered for Program awards. The Pinning Ceremony is held prior to graduation. Students will be responsible for the cost of the pin for the program.

Readmission

Readmission to the Diagnostic Medical Sonography Program is based on a review of, but not limited to, past academic and clinical evaluations, and evidence of interim efforts to strengthen areas of weakness. A student is eligible for readmission to the Diagnostic Medical Sonography Program once. Consideration for readmission to the program can only be granted if there are available openings, clinical resources and faculty. In the event there are more readmission applicants than available openings, a ranking system will be applied. Readmission requests are evaluated on an individual basis. The Program Director reserves the right to deny readmission to those students who do not complete the requirements of the exit plan.

Readmission Requirements

All applicants for readmission must:

- Have successfully completed the first semester of the DMS Program;
- Be in good clinical standing at the time of leaving the Program;
- Maintain a minimum GPA of 2.75;
- Schedule an exit interview with the Program Director within thirty (30) days of leaving the Program;
- Submit a request for readmission to the Program Director within 12 months of withdrawing;
- Submit current health assessment forms prior to the start of the semester in which they will be readmitting.
Students who withdraw because of personal or health-related problems and who are in good academic and clinical standing are eligible to reapply to the Program the following year. Applications for readmission should be accompanied by a physician’s release and a completed health form which states she is able to return to class and clinical attendance with no restrictions. Students may be required to repeat/audit Sonography courses previously taken.

**Readmission Process**

The student must:

- Meet with the Program Director to complete the exit interview.
- Submit a request for readmission letter to the Program Director by April 1st for the fall semester, November 1st for the spring semester or January 1st for the summer session.
- Describe in a letter efforts made by the applicant to strengthen areas of concern that were identified in the exit interview.

**Ineligibility for Readmission**

- A student who receives a final grade of F (Fail) in any clinical practicum or internship
- The student has been readmitted once
- A student who has previously withdrawn or been dismissed from the Sonography Program for more than 12 months.

**Attendance Standards**

**Didactic Attendance**

By enrolling in the College, the students accept responsibility to take full advantage of his/her educational opportunity by regular attendance at classroom and laboratory sessions. In the case of absence, program students are expected to notify the faculty 30 minutes prior to the start of class. Excessive tardiness is a disruption to the class, and will be dealt with as outlined in the syllabus.

**School Closing/Inclement Weather**

The student should refer to area radio and television stations or the College website for class delays, late openings, cancellations or school closing. In the event that College classes are cancelled, clinical experiences for that date will be cancelled. The clinical affiliate staff members do not have the authority to allow students to be excused from attending clinical due to inclement weather. Students can use their available clinical time off (CTO) if they are concerned about driving conditions. If the student chooses to use CTO time due to inclement weather, a full eight (8) hours will be deducted from their CTO bank.
**Clinical Attendance**

It is the responsibility of the student to be in attendance at the clinical affiliate where assigned. GWCC insurance covers students for scheduled hours only (not covered if starting early or staying late). Excessive tardiness and or absences may detract from a student’s clinical education. Excessive tardiness or absence may result in suspension or removal from the program. A minimum of 1,700 clinical hours will be completed prior to graduation which should prepare the student to perform as an entry-level sonographer at the program’s completion. It is required that all students attend all scheduled clinical hours.

Students are scheduled for eight (8) hours of clinical practice on their designated clinical days. Assigned hours for daytime rotations are 8:00 am – 4:30 pm. Assigned hours for evening rotations are 12:30 p.m. – 9:00 p.m. The student will take a one-half hour lunch/dinner break during their scheduled shift. Students should report to the clinical location assigned on time and be ready to start when your shift begins. No variation/alteration of these hours is permitted.

It is the student’s responsibility to log in and out daily using the online clinical documentation system required for the Program. Please note that this data will be part of your clinical grade. Failure to maintain accurate attendance records will result in loss of CTO hours for the rotation, as well as a failure for that rotation. Hours worked must be verified on a daily basis by the Clinical Coordinator and/or Clinical Instructor in your assigned area. Any inaccuracies, as determined by the Clinical Coordinator, entered into the online log in or log out time will be considered falsification of documents, and will result in immediate dismissal from the Diagnostic Medical Sonography Program.

Students are required to fulfill their clinical obligations. Therefore, no one is permitted to leave the clinical site before the shift ends unless the Clinical Coordinator has granted prior approval. Chronic absenteeism, tardiness and leaving early will be dealt with in accordance with the disciplinary policy for the Program. Tardiness is defined as reporting to your assigned area anytime later than the scheduled start time or returning late from your scheduled break. Tardiness will not be tolerated. Three (3) incidents of tardiness will result in a loss of eight (8) hours CTO.

Students are assigned to clinical rotations based solely on educational objectives and affiliate staffing. Students must complete their hours in their assigned area. Changes of scheduled clinical sites are not permitted. Any student initiating changes with the clinical site or other students will be removed from the clinical site and subject to disciplinary action. Because of the necessity to complete competencies in all areas, this policy will be strictly enforced. The Clinical Coordinator/Program Director reserves the right to change clinical assignments due to educational and/or staffing needs. Student requests for changes in clinical rotation assignments will not be considered. Students are required to rotate through all clinical sites. Students who are unable to report for clinical duty at the start of their scheduled shift must notify their Clinical Coordinator AND the Clinical Instructor assigned to the clinical area within one half (1/2) hour prior to the scheduled shift.
Clinical Time Off (CTO)

Students may only take CTO time in four (4) or eight (8) hour blocks. Students are allotted two (2) CTO days per practicum. Students are allotted three (3) CTO days during the summer internship. Students are allotted one (1) CTO day during the winter internship(s). CTO days cannot be accrued. All CTO must be recorded on a CTO form and submitted to the Clinical Coordinator.

- Scheduled CTO requires that a CTO form (Appendix L) be submitted 48 hours prior
- Unscheduled CTO requires that the CTO form be submitted prior to returning to the clinical site

An absence of more than two (2) consecutive days requires a physician’s note before returning to your clinical site. A student absent without notification for three (3) consecutive days on which the student was scheduled for clinical duty is considered a voluntary resignation from the Program without notice.

If a student exceeds the allotted days per practicum/internship, the excess will be made up at the discretion of the Clinical Coordinator/Program Director based on time/space availability at the clinical sites. If any time is owed by the end of the semester, the student will receive a failing grade for the attendance portion of the clinical grade for that semester. Make up time is NOT guaranteed. Should a student exceed the allotted CTO as outlined in the CTO policy, the student will be required to make up time during non-clinical days. The student must request permission from the Clinical Coordinator to make up missed time and receive an assigned date and clinical area for the make-up day.

Bereavement Time

When a death occurs in a student’s immediate family, the student will be granted bereavement time off, up to three (3) consecutive days, without loss of CTO days. The Program recognizes the following as immediate family: Spouse, parent, step-parent, daughter, son, brother, sister, step child, mother-in-law, father-in-law, daughter-in-law, son-in-law, grandparent, grandchild, a person who is legally acting in one of the above capacities, or another relative living in the student’s residence.

The Program Director reserves the right to require verification of the death and relationship. The student must submit a request for additional bereavement time to the Program Director.
Leave of Absence

A leave of absence may only be taken after satisfactorily completing the first semester of the Diagnostic Medical Sonography Program. If a student decides to withdraw from the DMS Program before the successful completion of the first semester, he/she must reapply to the Program as a new student.

In cases of extenuating circumstances such as extensive illness, hardship or emergency, a student may request a leave of absence from the Program for a period of no more than two semesters, after successful completion of the first semester in the Program. This request must be made in writing to the Program Director. Students on leave who wish to re-enroll must comply with the Readmission Policy.

Change of Address

The Program as well as the College must know the students’ place of residence and any change of name or address. If any changes occur, please notify the Program Director, Clinical Coordinator and the College Registrar’s Office.

Withdrawal from the Program

If a student wishes to withdraw from the DMS Program, it must be discussed with the Program Director, as well as the Director of Allied Health & Nursing. If the decision is final, a written notice of withdrawal with explanation from the student is required.

HEALTH AND SAFETY

Health Requirements

- All students are required to submit a current health assessment completed by a primary care provider within the last twelve (12) months. This assessment must be submitted to Castle Branch (Certified Background) by the due date stated on the candidate reply form. Clinical affiliate contracts state the student must be in good physical and emotional health and free of communicable diseases. Students will also be required to participate in a toxicology screening at Bridgeport Hospital. The student will be responsible for all fees associated with the toxicology screening. In accordance with Bridgeport Hospital policy, any student who has not been cleared by the Bridgeport Hospital Industrial Medical Center for practice at the site will not be eligible to practice at that site. In order to meet Program requirements for graduation, all students are required to rotate through all clinical sites. Therefore, any student denied access to Bridgeport Hospital will not be eligible for progression in the program.
• Certain clinical sites require students to undergo a background check for felony/misdemeanor convictions. The student will be responsible for all fees associated with the background check. Students who do not pass the background check may be excluded from the clinical site. In order to meet Program requirements for graduation, all students are required to rotate through all clinical sites. Therefore, any student denied access to a clinical site will not be eligible for progression in the program.

• Certain items may require additional follow-up during the Program (i.e. Hepatitis B immunization, Influenza vaccine, and Tuberculin testing). The student is required to follow all instructions for documentation of immunization status with the required laboratory reports, and to obtain the signature of the health care provider as indicated. The student is strongly encouraged to receive the Hepatitis B immunization series; any student who refuses to receive the immunization must submit the Hepatitis B waiver form.

• Each student must provide the Program Director, and in some cases the clinical affiliates, with documentation of a PPD (Tuberculin) test and the results on an annual basis. Each student must have current (within the last year) documentation of PPD results on file at the College. Students who have a history of positive PPD must submit one of the following: CXR report within the past two years or Quantiferon Gold lab test. In addition, all students are required to have influenza vaccinations as required by the clinical affiliates. Non-compliance without proper documentation will result in removal from the clinical affiliate, and may result in disciplinary action.

• All costs incurred for the health assessment, toxicology screen, background check, PPD and Influenza vaccinations are the student’s responsibility.

Technical Standards

Technical Standards reflect reasonable expectations of the Diagnostic Medical Sonography student for the performance of common functions of the registered sonographer/technologist. The DMS student must be able to apply the knowledge and skills necessary to function in a broad variety of clinical situations (see appendix D) or visit SDMS.org for more information.

Incident/Accident Reports

Students must report any occurrence that results in the generation of an incident report at a clinical affiliate site within 24 hours to the Program Director. Failure to do so will result in a disciplinary sanction. (See appendix E for incident report form.)
Standard Precautions and HIPAA

Students enrolled in the Diagnostic Medical Sonography Program must adhere to all policies and procedures concerning Standard Precautions and Infectious Disease Policies and Health Insurance Portability and Accountability Act of 1996 (HIPAA) as practiced at the assigned clinical affiliate.

Students must never disclose confidential information including anything pertaining to the medical history, diagnosis, treatment, and prognosis to anyone not directly involved in the care of the patient. In addition, students are required to follow HIPAA regulations on “Protected Health Information” which includes any “individually identifiable health information.” This includes information such as the individual’s past, present or future physical or mental health or condition, the provision of health care to the individual, or the past, present, or future payment for the provision of health care to the individual, and that identifies the individual or for which there is a reasonable basis to believe it can be used to identify the individual. Individually identifiable health information includes many common identifiers (e.g., name, address, birth date, Social Security Number).

Please visit www.hhs.gov/ocr/privacy/hipaa/understanding/summary/index.html for more information. Failure to adhere to this code constitutes a violation of the “Right to Privacy Act,” as well as HIPAA and is professionally unacceptable, as well as potentially compromising from a medical/legal standpoint.

Health and Safety Training: Blood Borne Pathogens

Students are required to complete the online CT Hospital (CHA) Health and Safety Training Course prior to participation in clinical experiences. Students are required to pass the corresponding test with a grade of 85. If the student does not achieve a passing grade, the student will be required to review the information and retake the test. The course is available at: http://www.cthosp.org/career/healthcourse2010/main.html.

Basic Life Support

Students are required to provide and retain documentation of current professional level certification in Basic Life Support for adult, child and infant. Certification can only be earned through the American Heart Association or the American Red Cross and must remain current throughout the Program. Courses meeting this requirement are:

- The American Heart Association Basic Life Support (BLS) for Healthcare Providers
- The American Red Cross CPR/AED for the Professional Rescuer

A copy of the current certification card must be submitted to Castle Branch (Certified Background) prior to the start of the first semester or by the date on the candidate reply form. Failure to comply will result in exclusion from the clinical learning experience.
**Latex Allergies**
College DMS laboratories and many clinical sites are not latex-free. Students who enter the Program with a latex sensitivity must notify the Program Director or Clinical Coordinator and develop a plan of action.

**Liability Insurance**
Professional liability insurance is provided for students by the College. Students may also purchase additional professional liability insurance on their own.

**Smoking Guidelines**
Gateway Community College is a smoke-free campus/workplace. Students are required to follow hospital policy regarding smoking. Please be advised that we require all students to come to clinical free from any tobacco product odor. If a student smells of tobacco products they will be asked to leave clinical immediately and will lose CTO time.

**Pregnancy Standard Volunteer Notification**
The pregnancy standard is a voluntary Program intended to provide an option for pregnant students who are considered to be occupationally exposed to ionizing radiation at the clinical setting.

In the event, however, that a student becomes pregnant, she has the option to declare or not declare the pregnancy.

- Declaration of pregnancy is a voluntary option and may be withdrawn at any time. The student has the right to not declare the pregnancy and remain in the program with no modifications. The student may revoke a declaration of pregnancy at any time (this must be submitted in writing).
- Choosing not to declare a pregnancy will result in no exemption from the specific radiation protection regulations limiting the exposure to the embryo/fetus. Whether or not pregnancy is declared, the pregnant student is advised to consult with her physician.
- The Program/Affiliate Site/College will not assume liability for exposure in any case of pregnancy.

In the event of a suspected or confirmed pregnancy, it is the responsibility of the student to advise her Program Director in writing of her condition if she chooses to declare the pregnancy. Pregnancy will not affect the student’s enrollment in the academic courses in the Program. Within 1 week of voluntary declaration of pregnancy, the declared pregnant student must provide the Program Director with written indication of intent to:

- Continue in the program with or without modifications.
- Take a medical leave of absence with intent to complete the program.
- Withdraw from the program.
The declared pregnant student must provide the Program Director with a written letter from her physician letter including the estimated date of conception and estimated date of delivery, as well as providing medical clearance for:

- Continuing in the Program as a full-time student, and/or
- Any limitations placed upon the student while enrolled in the Program.

All clinical days/hours missed by the student must be made up which may result in a delay in the completion of the Program.

The student will be expected to complete all the requirements for, didactic course(s) in which she is enrolled, prior to enrolling in the next semester’s coursework.

Prerequisite courses must be completed prior to the beginning of the next course.

If the student wishes to return to the Program within six weeks after the delivery, the student will provide a written medical clearance from her physician.

If a leave of absence is taken, the student must comply with the Program Readmission Standard.

**Transportation and Parking**

- Students are responsible for obtaining their own transportation to and from the College and clinical affiliates.
- Students will travel to clinical affiliates located throughout Connecticut.
- Students are subject to the parking regulations established by the clinical affiliates and are expected to park in designated areas only.
- If a violation occurs, the car may be towed at the student’s expense.
- The College and the DMS Program are not responsible for expenses associated with traveling to the site, parking or towing, or injury to property sustained at a clinical affiliate site.

**CLINICAL GUIDELINES**

**Introduction**

Clinical affiliates are an integral component of this program and of student clinical education. Because of the experience students gain scanning skills and learn sonographic techniques. Students are expected to become familiar with the standards and procedures set forth by not only this handbook, but by each individual site. DMS students are responsible for following all established rules and regulations of both GCC and their clinical affiliate. Students are responsible for attending all scheduled hospital orientation sessions. They are also responsible for maintaining current immunizations, TB and CPR training documentation for the entire time they are in the program. The student may be required to provide any or all of this information to the clinical sites directly before rotations.
Keeping Your Own Records

Students are strongly advised to keep “hard copies” of their completed clinical documentation in a three ring binder. While our clinical documentation system is online, computer errors do sometimes occur. Students are encouraged to make copies on a continuous basis, and are responsible for making the copies at their own expense.

Guidelines for Student Supervision in the Clinical Education Setting

Students are required to perform Sonographic procedures under direct supervision until the student has been signed off on the specific competency. Once this competency has been achieved, the student can perform the procedure under indirect supervision. Students are never to perform any Sonographic exams without the appropriate level of supervision.

Direct Supervision: Student supervision under the following parameters:

a. A qualified sonographer reviews the procedure in relation to the student’s achievement;

b. A qualified sonographer evaluates the condition of the patient in relation to the student’s knowledge;

c. A qualified sonographer is present during the conduct of the procedure;

d. A qualified sonographer reviews and approves the procedure/images;

e. A qualified sonographer is present during student performance of any repeat of any unsatisfactory sonogram.

Indirect Supervision: Student supervision under the following parameters:

a. A qualified sonographer must be immediately available to assist the student regardless of the level of student achievement. Immediately available is interpreted as the presence of a qualified sonographer adjacent to the room or location where a Sonographic procedure is being performed. Contact via electronic devices such as cell phones or pagers are not acceptable.

b. A qualified sonographer reviews and approves the procedure/images;

c. A qualified sonographer is present during student performance of any repeat of any unsatisfactory sonogram.

Imaging Sign Off

No student, regardless of competency level, will perform any imaging procedure without first reviewing the request with a qualified Sonographer. All images must be reviewed and approved by a qualified sonographer before the image can be sent to the radiologist for interpretation. There are no exceptions.
Diagnostic Medical Sonography Program Uniform Requirements

Students are required to purchase the uniform designated for the Sonography program. It consists of navy blue scrub pants and navy blue, embroidered scrub top. Scrub tops without the prescribed program embroidery are not acceptable. The scrubs must be purchased from the specified vendor (Appendix M). There are no other uniform colors/combinations to be worn. The student must wear white, closed toe, closed back, leather uniform shoes or white leather low-top sneakers. Sneakers should be all white - no colored stitching or colored laces. High top sneakers are not allowed. Students may wear a short white lab jacket or smock while in the clinical setting or a white tee shirt or a long sleeved white shirt can be worn underneath the navy blue, embroidered scrub top. The following general uniform guidelines must be followed at all times:

- Uniforms should be clean, pressed and properly maintained. Shoes should be clean, well-constructed and practical.
- Tattoos should be covered at all times.
- Hair longer than shoulder length must be securely tied back to keep from coming in contact with patients. Appropriate hairstyles and accessories are to be conducive to the professional atmosphere of the clinical affiliate.
- Appropriate levels of daily personal hygiene suitable for patient contact should be maintained including bodily cleanliness. Facial hair must be trimmed.
- For purposes of safety and protection, earrings must not extend beyond ear lobes and ornamental rings are not permitted in direct patient care areas. Necklaces, excessive rings and ornamental jewelry of any kind (including any type of facial piercing) are not permitted. These can be hazardous to the patient as well as the student.
- Fingernails must be kept at a length of no more than ¼ inch as recommended by the CDC, clean and well-manicured. Nail polish, if worn, must be neatly maintained (free of cracks and chips). A single color is recommended. Rhinestones, sparkles, designs or foreign bodies/nail jewelry are not permitted. Artificial nails and nail tips are NOT permitted in the clinical setting.
- Cosmetics, including perfume and/or cologne are to be used in moderation.
- Chewing Gum is not allowed.
- Hospital ID badges and GCC student ID badge must be worn at all times in clinical affiliates. Lanyards are not allowed. All ID’s must be visible and attached to the uniform or lab coat.
Clinical Standards

The ultimate level of honesty and integrity is expected from all DMS students. Students should respect lines of authority in the clinical setting and follow the instructions of their immediate supervisors. The lead sonographer and the clinical instructor are the immediate authority in the clinical setting. Be motivated to learn from others and request to be present during exams. Ask to start exams and/or scan after the sonographer. Be present from the beginning of a test until the end, unless the sonographer dismisses you. Demonstrate initiative and a willingness to participate; however, only attempt procedures for which you have received permission. Be attentive to those who are giving instructions and explaining procedures and ask questions pertinent to the situation. Do not hesitate to request clarification of any written or verbal order prior to the patient procedure; however, do not bring up concerns while in the presence of a patient. Diagnostic interpretation of imaging and/or treatment decisions are always made by the physician. Students should not communicate personal interpretive diagnostic judgments to patients, family members, etc. as this is a serious breach of medical ethics. Do not allow the patient to coerce you into giving information that is not within your scope of practice and authority to relate. You may assist the patient by giving them information as to who they can contact for their results and when their results will be available. Proper medical record keeping is a fundamental responsibility and obligation of the health care professional. Records should be complete, legible, and accurate. When writing technologist notes/worksheets, stick to the facts and use medical terminology to describe the findings or limitations of the study. Personal and/or negative comments are not acceptable.

Confidentiality

Students must never disclose confidential information (anything pertaining to the medical history, diagnosis, treatment, and prognosis) to anyone not directly involved in the care of the patient. Failure to respect this code constitutes a violation of the “Right to Privacy Act”, is professionally unacceptable, as well as potentially compromising from a medical legal aspect. Questions from the patient and family should be addressed to the staff technologist. Any images that students are allowed to acquire and use for objectives or case evaluation/studies/presentation must have all identification removed. No images may be removed from a clinical site without the permission of the supervising sonographer. Students are prohibited from asking patients themselves and/or acquiring images on their own. Failure to do so will result in immediate removal from the Program.
Professionalism

A patient must feel that those participating in his/her medical care are competent, confident and worthy of the trust placed in them. The impression that you give to the patient as to your level of professionalism is an important factor in creating a feeling of confidence and trust. Always address the patient as dictated by the site protocol and introduce yourself and any other person participating in the procedure. Avoid addressing patients by endearments. Be courteous and respectful at all times. Provide the maximum comfort, privacy, and safety for your patient. Become an empathetic and encouraging listener; however, make an effort to avoid becoming involved in discussions of the merits or failures of other health care professionals or facilities. The patient has a right to know about the procedure being performed, so be willing to answer questions within your knowledge base. Deal with the patient’s questions with honesty, tact and integrity.

Your ability to correctly recognize how your tone of voice, words, actions, and behaviors are being interpreted by patients, colleagues, and physicians are important tasks which you must master.

Behaviors which patients interpret as professionalism include:
- A warm greeting with a smile.
- Explaining each step of the procedure.
- Demonstrating focus and interest in the task.
- Portraying positive facial expressions.
- Displaying respect, compassion, and kindness.
- Maintaining composure at all times.
- Accepting the patient’s physical appearance.

Urgent/Stat Findings

During the course of the clinical internships/practicums, the student will most likely encounter patients who have urgent/stat sonographic findings (new acute thrombus, new arterial occlusion, etc.) and/or clinical situations (fainting, trouble breathing, etc.). The student should report these urgent findings/situations immediately to their supervising sonographer. If a student is in doubt whether a finding/situation is urgent/stat, the student should err on the side of caution and report the finding immediately to the supervising sonographer.

Accepting Critique

As a student there is no need to feel hesitant about asking questions, seeking clarification, or advice and assistance at any time. Constructive critical analysis of your work and progress is an essential part of the educational process. You will have the opportunity to comment freely and respond to the periodic evaluative reports made by faculty and clinical instructors. Make an effort to take necessary constructive feedback in stride and benefit from it.
**Ergonomics**

In the sonography profession, it is very important to understand and follow ergonomically correct scanning practices at all times to reduce the risk of musculoskeletal injury. Prior to beginning each patient, the student should ensure that the ultrasound equipment, stretcher, and chair are properly adjusted for the student’s comfort. The patient should be positioned as close as possible to the student, the student should rest their arm on the patient whenever possible, and the student should keep their scanning arm as close to their body as possible. There are many companies that focus on ultrasound ergonomics and specific scanning accessories are available to assist sonographers (arm/wrist supports, cable braces, etc.). Posters with specific exercises designed to help sonographers are also available. Please see Appendix N for more information about ultrasound ergonomics.

**Clinical Labs & Scanning Practice**

Clinical Lab is designed to expose students to scanning techniques, planes of the body, and normal structures within the body. In order to accomplish this, students are encouraged to participate as both the scanner, and the scanned. If any students does not want to participate in being scanned, other arrangements may be made by the faculty to accommodate them. The student needs to inform the faculty in advance so arrangements can made ahead of time. Fellow students and instructors will be positioning the student ‘patient’ and scanning them with an external transducer in areas such as the abdomen, neck, arm, etc. All in-school clinical lab scan time must be documented on the log-in sheets in the lab. Documentation must include the student who is scanning, the student being scanned, and the start and end times. A student who is pregnant cannot be scanned. Student scanners may not report findings to student ‘patient’ volunteers. Internal and/or private area sonograms such as transvaginal, breast, and scrotal sonograms are **not** to be performed on students during in-school clinical labs. A phantom and simulation equipment are available in the clinical lab for students to practice breast and transvaginal scanning.

If any pathology is revealed during scanning practice, the DMS program and GCC are not responsible for medical treatment. These exams are **NOT** diagnostic exams and do not take the place of appropriate medical diagnosis and treatment with the student’s healthcare provider.

**Employment Policy**

Due to the concentrated and intense nature of the program, outside employment may be difficult. Students should make sure their clinical hours are separate from employment hours. No student may be employed in a position as a sonographer before graduation. Any employment of students must be outside the regular educational/clinical hours and cannot be used as the required clinical hours. Students may not receive monetary gifts from staff or patients. Any questions or concerns about clinical requirements should be brought to the attention of the Clinical Coordinator/Program Director.
CLINICAL EDUCATION

RATIONALE

The clinical aspect of the Diagnostic Medical Sonography Program is of utmost importance. Clinical skills must be performed routinely in an accurate, professional and caring manner. The Gateway Community College Sonography Program has developed task objectives and an evaluation system to meet these standards. Clinical education encompasses four specific categories: technical skills, patient care skills, clinical skills, and behavioral skills.

Clinical objectives specific to each rotation have been developed. Areas included are:

- Normal Abdomen
- Early OB
- Small Parts
- Urinary Tract
- Anterior Abdominal Wall
- Brain and spinal cord
- Second and Third trimester OB
- Dedicated Vascular
- Invasive Procedures
- Quality Assurance
- Normal Pelvis
- Retroperitoneal
- Non-cardiac Chest
- Peritoneal cavity, including potential spaces
- Extremities
- Abdominal and Pelvic Vasculature
- Pediatric/Neonatal
- Pathology - Abdomen and Pelvis
- Cardiac
- Mobile Sonography

The student is instructed to gain knowledge in a logical, progressive manner. Basic skills are taught and learned before more complex ones are introduced. Once these individual skills are mastered and documented, the student then proceeds to assessment. Competency assessment occurs only after a student has obtained and/or successfully met the following requirements:

- Lecture on subject matter.
- Documentation of observation and knowledge of specific skills/subject matter.
- Demonstration of skills.

Once a student attains competency in any area or procedure, he/she shall maintain and practice these skills, unless competency is challenged by clinical staff.

By the completion of the clinical portion of the program, students will successfully complete a total of 13 final competencies, 75 mandatory initial attempts, and 30 elective mandatory attempts (see Appendix J) An entry-level Sonographer skill base must be exhibited during the exam for successful completion of the attempts and competencies. The initial attempt and final competency evaluation forms are located in Appendices G and I. All competency exams must be supervised by the Clinical Coordinator, Educational Assistants, or Site Clinical Instructors. Failure to complete the attempts and competencies within the scheduled timeframe listed in this handbook may result in clinical failure.
Method of Training
Students will rotate through the Ultrasound Department of the clinical affiliate in such a manner as to provide sufficient exposure to a variety of Sonographic examinations and procedures. Each assigned area is considered a clinical learning lab and each area is assigned a clinical instructor. During each clinical practicum/internship students will observe, assist and demonstrate each skill as it is taught and acquired. Students are afforded ample opportunity to complete all assigned task objectives, attempts, and competencies. Strengths and weaknesses are assessed through evaluation and the performance of attempts and competencies. Students have at least one clinical performance evaluation and at least one site visit evaluation per semester. These evaluations are identical, other than the name of the form. The clinical performance evaluation is performed by a Site Clinical Instructor and the site visit evaluation is performed by either the Clinical Coordinator or an Educational Assistant. The clinical performance evaluation is located in Appendix H.

The clinical training is correlated with the didactic education. The clinical training is broken down into three levels of mastery skills as presented within the clinical setting:

Level I: NORMAL ANATOMY
Level II: NORMAL VARIANTS and COMMON PATHOLOGY
Level III: DOPPLER STUDIES and PATHOPHYSIOLOGY

Mandatory Imaging/Treatment Sign-off Policy
No student, regardless of competency level, will perform any diagnostic or treatment procedure without permission of a supervising sonographer. The student must review the scan request with the registered sonographer prior to beginning the scan. Students are prohibited from dismissing a patient without the permission of a supervising sonographer. All images must be reviewed by the supervising sonographer. Non-compliance will result in immediate dismissal from the program. There are no exceptions.

Repeat Policy
No student will repeat a scan without direct consultation with a sonographer. A clear explanation of the reason for repeat must be documented. Non-compliance will result in immediate dismissal from the program. There are no exceptions.
Clinical Evaluation
Specific initial attempt, competency, and objective requirements are due for each practicum/internship. These assignments are listed in this handbook and will be posted on Blackboard/Trajecsys. Failed competencies and/or objectives are documented and addressed through action plans and follow up.

Clinical Process
- Students must complete objectives and fulfill initial attempts and competencies in accordance with the handbook and syllabi.
- Students will be evaluated on a regularly scheduled basis by the designated clinical instructor at the clinical site.
- Students will also be evaluated by visiting GCC clinical instructors.
- The purpose of the evaluation is to measure the progression of the student’s clinical knowledge, critical thinking, technical and behavioral skills.
- The written evaluations are submitted onto Trajecsys. The Clinical Coordinator will review all evaluations to offer direction and improve areas of deficiency.
- Students will review all initial attempts, competencies, and evaluations and submit their electronic signature through Trajecsys.

Student Records
Students are required to maintain their clinical records in Trajecsys in order to document initial attempts, competencies, number of cases, and clinical hours for reference when applying to the ARDMS or employment. Clinical records and evaluations cannot be removed from the college once they are submitted. Students are encouraged to make copies on a continuous basis, and are responsible for making the copies at their own expense. Students are advised to complete paperwork before leaving a site. No student is allowed to return to a clinical site once their practicum/internship has ended. Failure to comply with this will lead to clinical failure and then removal from the program.

CLINICAL GRADING PROCEDURE
The grade will be in the form of a P for “pass” or F for “fail” or I for “incomplete” and is computed in the following way: ‘P’ requires 100% completion.

- Completion of clinical objectives and case evaluation study
- Review and signature on clinical practicum/internship paperwork/evaluations
- Completion or attempt of clinical initial attempts and final competencies
- Clinical laboratory performance
- Attendance and punctuality
The student is responsible for the completion and documentation of all clinical expectations for practicum/internship prior to the last day at the clinical site. To remain eligible for continuance of clinical studies, students must show continual progression of skills in this competency-based program. The student must master and maintain all past performance objectives and competencies through the final practicum. Students are unable to advance to the next clinical level with a fail or incomplete grade.

**Initial Attempts and Final Competencies**

The final competencies, mandatory initial attempts, and elective initial attempts consist of various exams and procedures. The level of difficulty will escalate as the student progresses through the clinical portion of the program. The student will be responsible for completing an assigned number of initial attempts and/or final competencies per clinical practicum/internship.

The Clinical Coordinator and/or Clinical Instructors will provide instruction of technical and clinical skills needed to obtain initial attempts and competencies. The initial attempts and competencies are to be acquired in a timely manner by the students in accordance with the Initial Attempt/Competency Requirement Schedule.

The materials presented during didactic lecture are reinforced through active participation in the clinical setting. Once a student has successfully mastered a competency, they must demonstrate their skill to a registered sonographer. The sonographer evaluates the student’s skills according to the program’s criteria for performance evaluation and the completed initial attempt or final competency is completed in Trajecsys. The student is required to document all of their clinical participation in a daily log book and subsequently enter this information into Trajecsys. The documentation should include the type of exam, the level of participation, the supervising sonographer, and the type of pathology (if applicable). The organization and updating of Trajecsys is considered part of your clinical grade.

Completion of the final competencies verifies that the student has met the following criteria:

- Received instruction on subject matter.
- Observed procedure in clinical setting.
- Demonstrated knowledge of the examination to the registered sonographer.
- Performed procedure under direct supervision with limited assistance from registered sonographer.
- Informed the instructor in advance of intention to complete competency.
- Performed procedure under direct supervision of registered sonographer with no assistance.

*Regard clinical training as if it were a two year job interview*
Clinical Expectations

Clinical Journal
Students submit a weekly journal entry through Blackboard. Failure to submit entries or meet criteria will result in clinical suspension and loss of CTO. These journals are private - only the student and the Clinical Coordinator can view the entries. The Clinical Coordinator will review and grade weekly, and 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 the Clinical Coordinator. 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 200 – 300 words
- 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: Loss of CTO hours, clinical suspension, and/or removal from the clinical site.

Practicum/Internship Overview & Objectives
All objectives are submitted through Blackboard
- Objectives must include: student’s name, practicum/internship, category & number.
- Objective must be stated with student’s written narrative/image submission.
- All images must be annotated and labeled correctly.
- HIPAA regulations must be followed and all patient info must be removed from images.
- Submission of online images is prohibited.
- Any objective unattainable due to site limitations must be reviewed and approved by the Clinical Coordinator.
- No clinical grades will be submitted and students will not be permitted to advance to the next clinical practicum/internship without complete objective submissions unless prior approval has been granted by the Clinical Coordinator.
Practicum I (Tuesday and Thursday)

This is an introductory lab. The students will be expected to:

- Explain the role of Sonography in patient management
- Explain their role in the care of patients
- Relate professionally with patients and co-workers
- Explain the use of equipment controls and parameters
- Integrate didactic course work with clinical application
- Identify patient history, physical exam, and related imaging and laboratory tests
- Demonstrate proper Sonographic scanning techniques when performing basic scans
- Identify and distinguish normal anatomy
- Prepare case studies to be presented in class
- Complete objectives assigned

Abdomen

1. Obtain a scan of the liver and describe the case in a written narrative. Explain if any of these parameters differ from normal such as heterogeneous, enlarged, irregular contour, mass, cyst, etc. (Images & written narrative)
2. Case evaluation to rule out cholelithiasis. (Images & case evaluation requirement)
3. Document the right and left diaphragm in sagittal and transverse planes on an image. (Labeled images)
4. Obtain aortic images displaying proper measurements of the proximal, middle, and distal aorta and proximal common iliac arteries in the sagittal and transverse planes. (Images w/measurement)

OB/GYN

1. Explain in detail why or why not a distended bladder is needed to perform a pelvic/early OB scan. Compare the benefits of both transabdominal and endovaginal scanning. (Written narrative)
2. Case Evaluation of transabdominal pelvis or 1st trimester gestation. (Images & case evaluation requirements)
3. Obtain images of the anatomic landmarks to identify pelvic structures. (Labeled images)
4. Describe endometrial phases during menstruation. Provide images depicting at least one phase, if available. (Images & written narrative)
General Sonography

1. Perform tasks of stocking departmental supplies, towels, gel, sheets, etc. Provide assistance with patient setup/interview. Document where supplies are kept for special procedures, drainages, etc. *(Written narrative w/ sonographer’s initials)*

2. The requisition contains important indications of the scan ordered. An important part of this first clinical is the ability to recognize the information relevant to the scan ordered. Choose a scan; document pertinent lab values and patient interview information. Discuss scanning techniques used to optimize imaging for this particular scan, positioning, breathing, transducer adjustments, etc. *(Images & written narrative)*

3. Define, describe and produce image examples of these Sonographic terms: homogeneous, heterogeneous, cystic, hyperechoic, hypoechoic. *(Images & written description)*

4. Submit equipment evaluation. *(Proper form & requirements)*

**Internship I** (Monday thru Friday)

This is an extension of the practicum I.
- Distinguish the role of Sonography in patient management
- Establish proper equipment settings
- Integrate previously learned didactic coursework with clinical application
- Interact in a professional manner with patients and co-workers
- Complete assigned clinical initial attempts

**Practicum II** (Tuesday and Thursday)

- Exhibit progression in: patient care skills, clinical experience, and professional behaviors
- Opportunity to consistently perform Sonographic scans under the direct supervision of a registered sonographer
- Interpret Sonographic finding of normal anatomy
- Formulate differential diagnoses in commonly seen pathology
- Complete assigned clinical initial attempts
- Complete assigned objectives
**Abdomen**

1. Demonstrate and describe a liver abnormality on a scan using Sonographic criteria. *(Images & written narrative)*
2. Describe liver “sparing” and produce an image if possible. *(Image & written narrative)*
3. Case Evaluation study on an abdominal ultrasound. *(Images & case evaluation requirements)*
4. Perform a detailed study of the pancreas. Distinguish the head, body, tail and vascular landmarks. Describe techniques used to produce these images; breathing, positioning, water, transducer adjustments, etc. *(Images & written narrative)*
5. Document and describe the portal veins (left, main & right) on an image. Measure the portal vein AP on inspiration & expiration. Follow portal vein to the portal splenic confluence in real time. *(Images w/measurements & written narrative)*
6. Obtain measurements of the CBD and CHD. Describe the importance of the distal duct. Document Sonographic ductal location. *(Images w/measurements & written narrative)*
7. Image and measure the spleen in longitudinal and transverse planes. Describe size, echogenicity, & contour. Use color flow to illustrate the hilum. *(Image w/measurements, color & written narrative)*
8. Use proper Sonographic techniques to demonstrate the neck, body, and fundus of the gallbladder in longitudinal and transverse planes. Produce an image of a GB abnormality. *(Images)*
9. Discuss the locations of free fluid in the abdomen. Provide images of ascites or pleural effusion. *(Images & written narrative)*

**OB/GYN**

1. Describe all of the following; fluid in the cul-de-sac, blighted ovum, threatened abortion, molar pregnancy, and ectopic pregnancy. Provide images of two of these conditions if possible. *(Images & written narrative)*
2. Case Evaluation study of a fibroid uterus. Discuss possible locations, symptoms and complications of these. *(Images & case evaluation requirements)*
3. Explain the clinical terms ‘large for dates,’ ‘small for dates,’ and ‘gestational age.’ *(Written narrative)*
4. Obtain the site’s early OB form and complete with the following information: LMP, EDD, parity, weeks by LMP, and reason for examination. *(Site form)*
5. Define follicle, corpus lutein, ovum, and zygote. Provide images of ovaries with follicles. *(Images & written narrative)*
Small Parts

1. Using Sonographic criteria demonstrate: the thyroid gland & isthmus in longitudinal and transverse planes and include measurements. A transverse comparison of lobes. *(Images w/ measurements)*
2. Examine the popliteal fossa for Baker’s cyst or popliteal aneurysm. *(Images)*
3. Describe the layers of breast tissue. Discuss the annotation and scanning planes of the breast. *(Written narrative)*

General Sonography

1. Perform tasks of stocking departmental supplies, towels, gel, sheets, etc. Provide assistance with patient setup/interview. Document where supplies are kept for special procedures, drainages, etc. *(Written narrative w/ sonographer’s initials)*

Internship II (Monday thru Friday)
- Demonstrate professional patient care skills and behaviors
- Progressively improve technical skills
- Execute Sonographic scans under the supervision of a registered sonographer
- Interpret Sonographic findings of normal and abnormal anatomy
- Formulate differential diagnoses in commonly seen pathology with minimum supervision
- Use good judgment in determining diagnostic quality of Sonographic images
- Complete assigned clinical initial attempts and final competencies
- Complete assigned objectives

Abdomen & OB/GYN

1. Prepare 2 case evaluations, one ABD/SP case and one OB/GYN case. The case evaluation form, images, facility report for both cases must be submitted to the clinical coordinator upon completion. A case presentation must be prepared for each of these case evaluations. Presentations will be scheduled during the fall semester.

Small Parts

1. Demonstrate a simple breast cyst with location reference. Describe the Sonographic criteria of a cyst. Discuss the echogenicity differences between fat and glandular tissue. Use proper location markers. *(Images & written narrative)*
2. Research and discuss the use of Sonography with a musculoskeletal condition. *(Written narrative)*
3. Research and discuss the technology and benefits of elastography breast ultrasound. *(Written narrative)*
Vascular

1. Observe vascular studies with concentration on reason for exam, positioning, and duplex imaging. Research Sonographic methods of vessels evaluation. *(Written narrative)*
2. Provide spectral analysis of the aorta and the IVC. Discuss the differences in the waveforms and reasons for these differences. *(Images & written narrative)*

General Sonography

1. Document the skills learned through didactic courses and previous clinical exposure that has enhanced your ability to become an independent scanner. *(Written narrative)*
2. Discuss your practice of good patient care skills, maintenance of HIPAA, use of proper communication skills, display of compassion, and knowledge of medical ethics. *(Written narrative w/sonographer’s initials)*
3. Describe the site’s procedure for obtaining requisition, previous studies, bringing patient into department, and presenting images to radiologist/resident. *(Written narrative w/sonographer’s initials)*
4. Submit equipment evaluation. *(Proper form & requirements)*

Practicum III (Monday, Wednesday, Friday)
- Perform and describe findings in advanced Sonographic procedures
- Establish proper scanning techniques with color, power, and spectral Doppler
- Explain appropriate Sonographic scanning procedures and findings to patient, co-worker, peers, instructors, and physicians
- Exhibit professional behavior
- Explain the professional role of the sonographer in patient management
- Formulate a professional use of the parameters of the Sonographic equipment
- Exhibit competency in patient care skills and interaction with other healthcare professionals
- Evaluate standard practices of patient interview, review of chart, and clinical symptoms
- Advance comprehension of vascular scanning, obstetrical, gynecological, abdominal, and small parts
- Integrate all didactic coursework with clinical application
- Complete assigned clinical initial attempts and final competencies
- Complete assigned objectives
Abdomen
1. Produce images of three different liver pathologies. Provide a descriptive paragraph on the differential diagnosis for these pathologies and provide evidence of your conclusion. Compare and contrast these 3 pathologies using Sonographic terminology. *(Images & written narrative)*

OB/GYN
1. Produce a color Doppler image of a 3 Vessel umbilical cord and its insertion into the placenta in a 2nd or 3rd trimester pregnancy. (Color images)

2. Perform an endovaginal exam for pathology. Discuss the patient’s symptoms and correlate them with differential diagnosis. Based on these, what is your conclusion? *(Images & written narrative)*

3. Describe the following disease processes: Compare and contrast using Sonographic terminology, patient signs and symptoms. Include possible management and follow-up for each of the following: Hemorrhagic ovarian cyst, and endometriosis. Provide images of each. *(Images & written narrative)*

Small Parts
1. Research and describe Fibroadenoma of the breast. *(Images & written narrative)*

2. Research and describe causes of scrotal swelling. *(Images & written narrative)*

Vascular
1. Case Evaluation carotid study with color flow and spectral analysis. *(Images & case evaluation form)*

2. Image and label a deep vein thrombosis study with color flow and spectral analysis. *(Images)*

3. Image the Portal System using color and spectral Doppler. Discuss the difference between hepatopetal and hepatofugal. *(Images & written narrative)*

4. Image the hepatic veins using color and spectral Doppler. Describe triphasic flow and explain why the hepatic veins display this pattern. *(Images & written narrative)*
Practicum IV (Monday, Wednesday, Friday)

- Integrate didactic coursework in Sonography with clinical practice.
- Become well-informed about safety regulations in the clinical setting.
- Recognize other imaging modalities in the Radiology Department.
- Perform patient care with emphasis on infection control & equipment
- Perform diagnostic quality OB/GYN, abdominal, pediatric, small parts and vascular examinations using proper scanning techniques and correct equipment manipulation with minimal supervision from the Clinical Instructor. Present cases to the radiologist for interpretation, as required.
- Investigate and document information pertaining to various professional organizations.
- Prepare and present case studies to students, staff and faculty.
- Practice quality patient-care skills without supervision.
- Demonstrate professionalism in manner of dress and speech.
- Adhere to a professional code of ethics.
- Provide a plausible preliminary diagnostic impression, including differential diagnoses.
- Assist with invasive procedures—biopsies, drainages, and amniocentesis.
- Compare diagnostic results of other imaging modalities and review reasons and contraindications for testing.
- Complete assigned initial attempts and final competencies
- Complete assigned objectives

Abdomen

1. Perform or assist with a liver or renal biopsy. Describe the sonographer's role in this procedure. *(Written narrative w/sonographer’s initials)*

2. Perform or assist a paracentesis or thoracentesis. Describe the entire setup. Image the area and describe the procedure including the amount and kind of fluid removed. *(Images, written narrative w/sonographer’s initials)*

OB/GYN

1. Image and describe placental grading. Discuss possibilities of problems arising from various placental locations and advanced grading. *(Images & written narrative)*

2. Case Evaluation of an advanced OB study (Level II or BPP). *(Images & case evaluation requirements)*

3. Produce images of 2nd trimester fetal measurements. *(Images w/measurements)*
Small Parts
1. Perform or assist in an invasive breast procedure. Describe the reasons for the test along with the patient prep and general discussion of the case. *(Written narrative w/sonographer’s initials)*

Vascular
1. Describe in detail the protocol for ruling out renal artery stenosis. Produce images of normal or stenotic renal arteries. *(Images & written narrative)*

2. Case Evaluation study of the ovaries using color and spectral flow Doppler. Discuss specifics of this Doppler study. *Describe the normal and abnormal waveforms.* *(Images, written narrative & case evaluation requirements)*

3. Produce power Doppler renal images with all of the arteries identified and labeled. *(Images)*

4. Provide a normal arterial spectral Doppler image with waveform components labeled. Explain the Peak Systolic Velocity, End Diastolic Velocity, Pulsatility Index, Resistive Index. *(Image & written narrative)*

General Sonography
1. Describe safety regulations specific to clinical site. *(Written narrative w/sonographer’s initials)*

2. Document infection control procedures at clinical site. *(Written narrative w/sonographer’s initials)*

3. Describe the professional organizations that are available to sonographers and what advantages they provide for further career advancement. *(Written narrative)*

4. Investigate the SDMS guidelines on Professionalism and Ethics. *(Written narrative)*

5. Submit equipment evaluation. *(Proper form & requirements)*
EVACUATION PLAN

Everyone in the building must evacuate when an alarm sounds and/or upon verbal notification by authorized personnel.

All persons in classrooms should be directed to move in an orderly manner to the designated exits posted on the Emergency Action Plan chart located on the wall of the room’s egress.

If time and safety permits, close all doors.

If your assigned exit is blocked, keep calm and seek nearest exit.

When outside of building proceed away from the building and stay out of roadways and areas utilized by emergency personnel.

Remain outside of the building until the security staff authorizes re-entry.

1. The Early Learning Center evacuated to the Temple Street Garage.
2. Gateway Garage evacuated to the Crown Street sidewalk.
3. Persons with a physical/mobility disability, who cannot exit, should be accompanied to the rescue area and where they shall wait for the emergency personnel to arrive and evacuate them.

The rescue areas are as follows:

Second Floor Bridge-stairwell/escalator
Third Floor Bridge-stairwell
Fourth Floor Bridge-stairwell

EMERGENCY LOCK DOWN PROCEDURES

If a lockdown occurs, proceed to nearest office or classroom. If already in office or classroom, stay there.

If time and safety permits, close and lock all doors

Shut off lights and stay out of sight

Dial 911 (9-911 from college phone) or call GCC Security 203-285-2246/203-285-2611 (52246/52611)

Do not leave your location until you are given an “all clear” sign by an authorized person – Police, Fire or Security Staff.

STAY: CALM, QUIET, WAIT
EMERGENCY REPORTING PROCEDURES

Notify the Security Department of any emergency situations

Keep calm

Keep others calm

Campus Security Department:

ON CAMPUS dial 52246

OFF CAMPUS dial 203-285-2246

* In a medical or police emergency in which Security cannot be reached, **dial 911**
  *(9-911 from college phone)*

EMERGENCY PHONE NUMBERS

Emergency Operator (All life-threatening Emergencies) ............. 9-911

When calling, stay calm and carefully explain the problem and location to the Dispatcher.
**Do not hang up until told to do so.**

Information to give to 911 and/or Public Safety:
- Your Name
- Emergency Location (Bldg. name & #, Floor #___, Room #___)
- Size and Type of Emergency
- Any Additional Information requested by the Operator

Security Department ............................................................ 203-285-2246 (X5-2246)
Building Maintenance Supervisor ........................................... 203-285-2240 (X5-2240)
Facilities and Events Management Director ............................ 203-285-2223 (X5-2223)
## APPENDIX A
### DIAGNOSTIC MEDICAL SONOGRAPHY
#### Plan of Study

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
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<td>Cross Sectional Anatomy</td>
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<td>English Composition</td>
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<td>MAT*115</td>
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<td></td>
<td>PHY*111</td>
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<td>DMS*105</td>
<td>Introduction to OB/GYN Sonography</td>
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<td>DMS*111</td>
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<td>CSC*101</td>
<td>Introduction to Computers</td>
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<td>DMS*201</td>
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<td>DMS*206</td>
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<td>DMS*207</td>
<td>Advanced Sonographic Pelvic Pathophysiology</td>
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<td>DMS*211</td>
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**Total Credits**: 17

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<tr>
<td>DMS*205</td>
<td>Advanced Abdominal/Small parts Sonographic Pathophysiology</td>
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<tr>
<td>DMS*208</td>
<td>Advanced Obstetrical Sonographic Pathology</td>
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<td>DMS*212</td>
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<td>Elective</td>
<td>Humanities</td>
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</table>

**Total Credits**: 14

**Total Program Credits**: 68
APPENDIX B

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
- To create and encourage an environment where professional and ethical issues are discussed and addressed.
- To help the individual diagnostic medical sonographer identify ethical issues.
- 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 competency.

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 (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 competency through lifelong learning, which includes continuing education, acquisition of specialty specific credentials and recredentialing.

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.

http://www.sdms.org/about/codeofethics.asp
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.
Gateway Community College Diagnostic Medical Sonography Program

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.
APPENDIX D

Technical Standards

Sonographers and Vascular Technologists must be able to:

- Lift more than 50 pounds routinely
- Push and pull routinely
- Bend and stoop routinely
- Have full use of both hands, wrists and shoulders
- Distinguish audible sounds
- Adequately view sonograms, including color distinctions
- Work standing on their feet 80% of the time
- Interact compassionately and effectively with the sick or injured
- Assist patients on and off examining tables
- Communicate effectively with patients and other health care professionals
- Organize and accurately perform the individual steps in a sonographic procedure in the proper sequence

http://www.sdms.org/career/career.asp
APPENDIX E

Diagnostic Medical Sonography Program

Incident Report Form

Student Name: ____________________________________________

Date of Incident: __________________________________________

Location of Incident: _____________________________________

Detailed Description of Incident (include others involved and witnesses, if applicable):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Student Signature: ________________________________________

Date Incident Report Completed: ______________________________

Outcome of Incident:
________________________________________________________________________
________________________________________________________________________

Program/Clinical Coordinator Signature: _________________________

Date: ______________________________________
APPENDIX F

ALLIED HEALTH DIVISION

ADVICEMENT FORM

Student's Name ________________
Program ________________
Date ______________________

PROBLEMS IDENTIFIED

CONCLUSION

RECOMMENDATION/ACTION PLAN

Follow-up Date:

Student __________________________________________ Date _____
Program Director __________________________________________ Date _____
Clinical Coordinator ________________________________ Date _____
Director, Allied Health Division __________________________ Date _____
APPENDIX G

Gateway Community College

Diagnostic Medical Sonography Program

Initial Attempt

*Responses to statements are either: Yes, No, N/A*

- Proper preset selected
- Identified & correlated patient/exam information
- Site scan protocol maintained
- Proper patient positioning utilized
- Structures surveyed in multiple planes / locations
- Borders & surrounding structures completely surveyed
- Relational anatomy evaluated
- Acoustic window adjusted to optimize visualization
- Abnormal/pathological findings evaluated and represented in multiple planes, if applicable
- Proper application of equipment settings to optimize images
- Proper placement of calipers & measurements obtained, if applicable
- Proper annotation applied
- Proper application of Doppler functions demonstrated, if applicable
- Communicated findings using proper sonographic terminology
- Demonstrated the ability to correlate differential diagnosis
- Recognized & properly identified acoustic artifacts
- Demonstrated the ability to compensate for artifacts & applied ALARA standards
- Archived sonographic images properly
- Requested sonographer’s presence during competency performance

**Sonographer's Comments:**

**Student Signature:** Student may add signature by attaching a post-submission comment. To do so, student logs in using his/her user name and password. Then, go to Reports/Completed Evaluations. Select the evaluation template; click View Details. Click on the plus sign (+) to add a comment.
APPENDIX H

Gateway Community College
Diagnostic Medical Sonography Program
Student Clinical Performance Evaluation

Responses to statements are either: Unsatisfactory, Needs Improvement, Satisfactory, N/A

Clinical/Technical/Professional Skills: Patient Assessment

- Assesses and verifies patient information, identification and physician requisition
- Correlates clinical history and physical presentation to the ordered procedure
- Reviews prior relevant exams
- Uses interviewing techniques to gather relevant clinical information and recognizes significant signs and symptoms
- Evaluates patient for insufficient preparation, unwillingness or inability to tolerate the exam
- Maintains patient confidentiality and complies with HIPAA regulations

Communication

- Establishes a positive relationship with the patient or patient's representative
- Elicits patient cooperation
- Provides escort to patients arriving and leaving the department
- Explains exam and responds to patient questions appropriately
- Provides translation and special needs communication tools as needed
- Refers specific questions about diagnosis, treatment or prognosis to the supervising sonographer/physician

Examination Skills

- Performs the appropriate diagnostic ultrasound procedure
- Uses proper transducer(s) and preset selections
- Uses proper patient positioning and accessory equipment appropriately
- Thoroughly surveys/sweeps anatomy to be imaged
Recognizes and identifies anatomic structures
Recognizes sonographic characteristics of normal and abnormal tissues
Uses good judgment representing anatomy and pathology

**Examination Skills (continued)**

- Uses proper imaging protocol, annotation, and cursor placement
- Acquires high quality diagnostic images:
  - Applies multiple planes, relational anatomy, depth, focus, gains, TGC
  - Modifies protocol as required due to disease process or patient condition
  - Adapts to physical circumstances as required (OR, Portables, ER)
- Uses advanced imaging features (Color, Power Doppler, Duplex) when appropriate
- Adjusts scanning technique to optimize color image quality and spectral waveforms
- Adheres to ALARA principles
- Provides comprehensive and sufficient imaging in a timely manner
- Confers with appropriate medical staff when necessary

**Patient Care Skills**

- Maintains patient safety, dignity and comfort at all times
- Monitors patient’s physical and mental status during the examination
- Performs basic patient care tasks and acknowledges site protocols for initiating critical care if necessary
- Requests assistance when warranted
- Maintains a clean and prepared exam room
- Utilizes standard precautions/infection control measures
- Provides appropriate age related care
- Demonstrates appropriate care for patient in areas outside department (portables)

**Documentation Skills**

- Provides clear and precise annotations/measures/calculations/images of the examination for archival purpose
- Documents appear in the appropriate medical record
- Ensures that the documentation is timely, accurate, concise and complete
- Documents any deviations from the established protocols and procedures
- Recognizes the need for urgent rather than routine reporting
- Provides oral or written summary of preliminary findings to the interpreting physician
Professional Skills

- Understands the role of the student sonographer
- Understands, respects and complies with department schedule and logistics
- Follows guidelines set by the GCC student guide and hospital procedure manuals
- Receptive to the learning experience
- Exhibits cooperative and proactive behavior, anticipates the needs of the department
- Employs analytical skills, uses good judgment, acts ethically
- Maintains a professional and engaged attitude toward patient, staff, physicians
- Embraces all types of challenges
- Accepts responsibility for his/her actions
- Conducts tasks with respect for the rights and wishes of others
- Demonstrates good listening skills
- Demonstrates reliability and timeliness

Overall Imaging

Select one performance level that best describes the student's current skills at this time.

1 - Student successfully admits/releases patient from the department. Shows initiative in the observation of scanning techniques and asks pertinent questions. Is an active participant in the care of the patient.

2 - Student successfully admits/releases patient from the department. Skills are progressing from observation to active participation in acquiring diagnostic images.

3 - Student consistently attempts to acquire diagnostic images/partial protocols for most patients that they admit/release from the department.

4 - Student successfully performs required imaging protocols for most patients that they admit/release from the department.

5 - Student works independently with minimal supervision from the assigned sonographer.

Sonographer's Comments:

Student Signature: Student may add signature by attaching a post-submission comment. To do so, student logs in using his/her user name and password. Then, go to Reports/Completed
Evaluations. Select the evaluation template; click View Details. Click on the plus sign (+) to add a comment.

**APPENDIX I**

**Gateway Community College**

**Diagnostic Medical Sonography Program**

**Final Competency**

*Responses to statements are either: Yes, No, N/A*

- Reviewed orders & patient prior history, relevant labs, & imaging exams
- Entered patient data in the system according to site protocol
- Identified patient according to site protocol
- Introduced self as a student sonographer
- Explained exam & conducted a proper exam interview
- Assessed patient’s tolerance of the exam
- Maintained patient’s dignity & comfort throughout the exam
- Proper preset selected
- Site scan protocol maintained
- Proper patient positioning utilized
- Structures surveyed in multiple planes/locations
- Borders & surrounding structures completely surveyed
- Relational anatomy identified & completely evaluated
- Acoustic window adjusted to optimize visualization
- Abnormal/pathological findings evaluated and represented in multiple planes, if applicable
- Proper application of equipment settings to optimize images
- Proper placement of calipers & measurements obtained, if applicable
- Proper annotation applied
- Proper application of Doppler functions demonstrated, if applicable
- Communicated findings using proper sonographic terminology
- Provides logical pathological differential diagnosis
- Recognized & properly identified acoustic artifacts
- Demonstrated the ability to compensate for artifacts & applied ALARA standards
- Archived sonographic images properly
- Provided an accurate sonographer’s impression & completed worksheets per site protocol
- Presented exam to Radiologist & used proper sonographic terms
- Requested sonographer’s presence during competency performance

**Sonographer's Comments:**
Student Signature: Student may add signature by attaching a post-submission comment. To do so, student logs in using his/her user name and password. Then, go to Reports/Completed Evaluations. Select the evaluation template; click View Details. Click on the plus sign (+) to add a comment.

APPENDIX J

DMS Final Competency and Initial Attempt Requirements

Final competencies

One competency for each of the exams listed below

Three initial attempts are required before a final competency can be performed, except for the equipment competency which is completed in the 2nd year Spring semester

Abdomen

  Normal complete abdomen
  Abnormal complete abdomen
  Normal renal
  Abnormal renal

OB/GYN

  Transabdominal or endovaginal pelvic
  1st trimester OB
  BPP or Biometry

Procedures

  Paracentesis or thoracentesis

Pediatrics

  Renal

Vascular

  Lower extremity venous
  Carotid

Small Parts
Thyroid

General

Equipment

**Mandatory Attempts**

**3 attempts required for each of the exams listed below**

*Abdomen*

- Abdomen complete normal
- Abdomen complete abnormal
- Renal normal
- Renal abnormal
- AO/IVC with Doppler

*GB/Biliary*

- Liver
- Pancreas
- Spleen
- RUQ

*OB/GYN*

- Endovaginal pelvic
- Transabdominal pelvic
- 1st trimester OB
- BPP
- Biometry

Procedures
Gateway Community College Diagnostic Medical Sonography Program

Paracentesis
Thoracentesis

Pediatrics
Abdomen
Renal

Vascular
Lower extremity venous
Carotid

Small Parts
Thyroid
Breast
Scrotum
Male Pelvis
Elective Attempts

30 initial attempts required (mix/match any of the exams below)

Abdomen
   Abdominal wall/hernia
   Appendix

Procedures
   Biopsy set-up
   Sonohysterogram
   Amniocentesis/chorionic villus sampling
   IUD insertion

OB/GYN
   Cervical length OB
   Multi-gestation
   Ovarian/uterine Doppler
   Fetal Doppler
   2\(^{nd}\) trimester OB
   3\(^{rd}\) trimester OB

Pediatrics
   Adrenal
   Neonatal head
   Neonatal hips
   Neonatal spine
   Appendix
   Intussusception
   Pylorus

Vascular
LE arterial
ABI
UE vein
UE arterial
Bypass graft, dialysis, stent, etc.
Venous mapping
Venous reflux

Small Parts
Soft Tissue
Neck (mass/map)
Non-cardiac chest
Scrotal Doppler

Visceral Vascular
Abdominal Doppler (liver, etc.)
Renal Doppler
Transplant

Musculoskeletal
Ankle
Elbow
Hip
Knee
Shoulder
Tendon
Wrist

Other

Other
## APPENDIX K

### Graduation Requirements

- 13 final competencies
- 75 mandatory initial competencies
- 30 elective initial competencies

### Requirements by Semester

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<th>Course</th>
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</tr>
<tr>
<td>DMS 126 – Clinical Internship II – Summer 1\textsuperscript{st} Year</td>
<td>1 final competency</td>
<td>20 initial mandatory attempts (mix/match)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 elective initial attempts (mix/match)</td>
</tr>
<tr>
<td>DMS 211 – Clinical Practicum III – Fall 2\textsuperscript{nd} Year</td>
<td>5 final competencies</td>
<td>25 initial mandatory attempts (mix/match)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 elective initial attempts (mix/match)</td>
</tr>
<tr>
<td>DMS 212 – Clinical Practicum IV – Spring 2\textsuperscript{nd} Year</td>
<td>6 final competencies</td>
<td>1 equipment final competency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17 initial mandatory attempts (mix/match)</td>
</tr>
</tbody>
</table>
DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM

Request for CTO Hours

Today’s Date _______________________ Student’s Name __________________________

Number of CTO Hours to be used: ______________________________________________

four (4) or eight (8) hours

Date to be used: _________________________________

Student’s Signature ____________________________________________

Clinical Coordinator Signature _________________________________________

Forms must be filled out and handed in at least 48 hours prior to request date unless otherwise specified.

* CTO time may only be taken in four (4) or eight (8) hour segments.
APPENDIX M

UNIFORM INFORMATION

SCRUB WEAR HOUSE
2409 Main Street
Rocky Hill, CT 06067
(860) 571-8966
Scrubwearhouse.net

SCRUB WEAR HOUSE
232 Boston Post Road
Milford, CT 06460
(203) 877-1293

SCRUB WEAR HOUSE
625 Wolcott Street
Waterbury, CT 06705
(203) 527-4440
APPENDIX N
Ultrasound Resources

*Diagnostic Medical Ultrasound Societies/Agencies*

ARDMS – American Registry for Diagnostic Medical Sonography  
www.ardms.org

SDMS – Society of Diagnostic Medical Sonography  
www.sdms.org

ARRT – American Registry of Radiologic Technologists - Sonography  
https://www.arrt.org/Certification/Sonography

AIUM – American Institute of Ultrasound in Medicine  
www.aium.org

SVU – Society for Vascular Ultrasound  
www.svunet.org

ASE – American Society of Echocardiography  
asecho.org

*SDMS Scope of Practice and Clinical Standards for the Diagnostic Medical Sonographer*

http://www.sdms.org/positions/scope.asp

*AIUM Practice Guidelines*

http://www.aium.org/resources/guidelines.aspx

*Ultrasound Ergonomics*

https://www.soundergonomics.com/

https://secure.sdms.org/mdi/default.asp

http://www.sonoworld.com/Client/Centers/Ergonomics.aspx
Transducer Cleaning

http://www.aium.org/officialStatements/57


http://www.usa.philips.com/healthcare-resources/feature-detail/transducer-care-cleaning