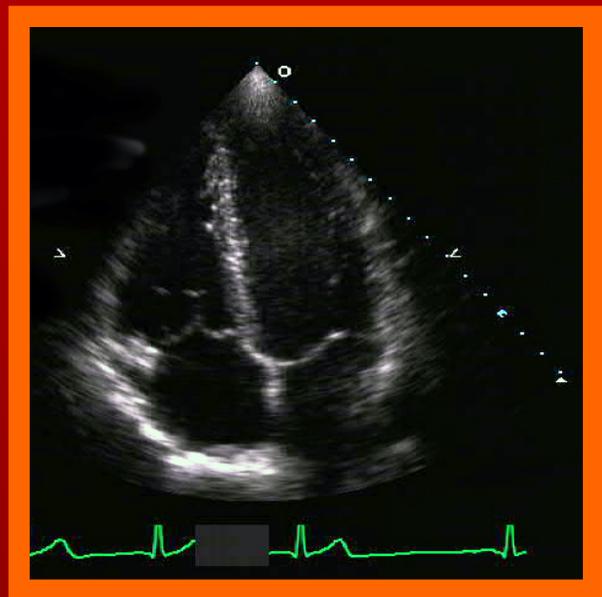
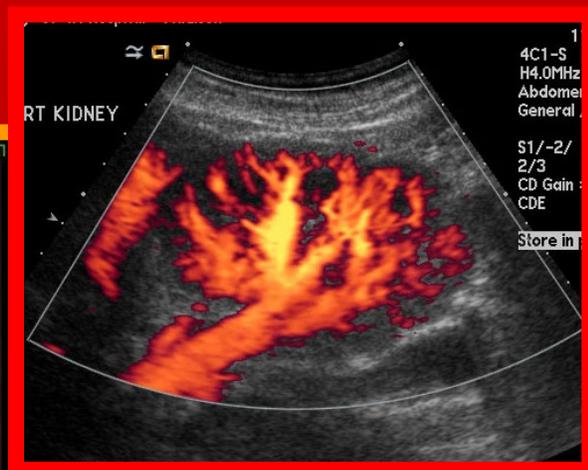


University of Wisconsin Hospital and Clinics
*School of Diagnostic Medical
Sonography*
Class of 2020-2022

Program Handbook



School of Diagnostic Medical Sonography

UWHealth

University of Wisconsin
Hospital and Clinics

Revised August 2020

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INTRODUCTION

Welcome to the UW Hospital and Clinics School of Diagnostic Medical Sonography

UW Health is the integrated health system of the University of Wisconsin-Madison serving more than 600,000 patients each year in the Upper Midwest and beyond with approximately 1,500 physicians and 16,500 staff at six hospitals and more than 80 outpatient sites. UW Health is governed by the UW Hospitals and Clinics Authority and partners with UW School of Medicine and Public Health to fulfill their patient care, research, education and community service missions.

UW School of Medicine and Public Health is the nation's only combined school of medicine and public health. Its 1,500 faculty in 10 basic science and 17 clinical departments engage in research, education and clinical care at UW Health's clinic locations, University Hospital, American Family Children's Hospital, UW Health at the American Center, UW Health Rehabilitation Hospital, other Madison hospitals and approximately 90 regional locations. UW Health is a nationally recognized regional health system that includes:

- University Hospital, a 505-bed regional referral center that is home to a Level One adult and pediatric trauma center, American College of Surgeons-verified Burn Center, one of the nation's largest organ transplant programs, one of the nation's first certified comprehensive stroke centers and the UW Carbone Cancer Center, one of 41 National Cancer Institute-designated comprehensive centers in the country

- UW Health at The American Center, a 56-bed, community-based health and wellness facility

- American Family Children's Hospital, a nationally ranked, 111-bed facility with pediatric and surgical neonatal intensive care unit

- UnityPoint Health-Meriter, a 448-bed community-based hospital providing a complete range of medical and surgical services for residents of Dane county and surrounding communities. Learn more about the UW Health and UnityPoint Health-Meriter Partnership

- UW Health Rehabilitation Hospital, a 50-bed, post-acute inpatient rehabilitation facility

- A regional division that extends to Rockford, Illinois, and includes the 333-bed Swedish American Hospital, an associated 34-bed inpatient/outpatient medical center in Belvidere, Illinois, and regional cancer center in Rockford

The UWHC campus is the host site for the School of Diagnostic Medical Sonography and the program was started in 1980. The UWHC School of Diagnostic Medical Sonography (DMS) is affiliated with Carroll University, Edgewood College, Marian University, University of Wisconsin – Oshkosh, University of Wisconsin – LaCrosse and the University of Wisconsin – Milwaukee to offer a baccalaureate degree and post-baccalaureate program in diagnostic medical sonography. Students complete their pre-requisite course work at their sponsor university, and their professional education at UWHC. Prospective students may apply to the Echocardiography/ Vascular Sonography or General/ Vascular Sonography educational programs.

The echocardiography and general sonography options include didactic and clinical instruction in the areas of general sonography, cardiac and vascular ultrasound in a format that integrates classroom teaching and practical experience. Laboratory demonstrations of equipment control operation and patient examination methods are employed in all courses. The school places great emphasis on clinical training in addition to a didactic curriculum with a weekly schedule that includes classes and clinical training.

Disclaimer

The University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography does not discriminate based on race, sex, handicap, religion, age, national origin, or veteran's status.

Contact Information

Any questions or concerns regarding the admissions, education curricula, or administrative policies held by the University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography should be directed to the program director.

Michelle Cordio M.Ed., ACS, RDMS, RVT, RDCS
Program Director
PH: 608-890-6493
mcordio@uwhealth.org

Jami Parkins M.Ed., RDMS, RVT
Clinical Education Coordinator
General/ Vascular Sonography Option
PH: 608-890-9186
jnemitz@uwhealth.org

Lindsey Thomas BS, RDCS, RVT
Clinical Education Coordinator
Echocardiography/ Vascular Sonography Option

UW Hospital and Clinics Mission Statement

The mission of the University of Wisconsin Hospital and Clinics (UWHC) School of Diagnostic Medical Sonography is to educate students in the art and science of diagnostic medical sonography and to prepare competent entry-level general, adult cardiac and vascular sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Our graduates serve all of Wisconsin, which parallels the mission of the University of Wisconsin (UW) -Madison. Our mission complements the missions of UW Health, UW Center for Health Sciences and the UWHC. These overall missions include caring for the ill and injured, serving community health needs, educating new health professionals, and furthering the use for medical research through medical imaging. As an integral part of the UWHC health community, students participate in the achievement of the schools and institution's mission and goals.

Our school's mission is achieved when the graduate has successfully completed the program, achieving the outcomes, goals and objectives, as determined by the program standards. These specific outcomes, goals,

PH: 608-890-7985
lthomas@uwhealth.org

Melinda Omata MBA, RDMS, RVT
Didactic Instructor
PH: 608-890-6295
momata@uwhealth.org

Steven Williams BS, RDCS, RVT
Didactic Instructor
PH: 608-890-6951
swilliams3@uwhealth.org

Mailing Address:
School of Diagnostic Medical Sonography
University of Wisconsin Hospital & Clinics
610 N. Whitney Way, Suite 440
Madison, WI 53705
FAX : 608-263-9208

Web page www.uwhealth.org/ultrasoundschool

objectives and standards follow in the UWHC School of Diagnostic Medical Sonography (DMS) Academic Policy Manual. The program's mission, goals, outcomes, and standards are evaluated annually by the faculty, department, and hospital administration, and the school advisory committee.

Program Philosophy

With a strong commitment to excellence, the UWHC School of Diagnostic Medical Sonography (DMS) is affiliated with Carroll University, Edgewood College, Marian University, and the Universities of Wisconsin – Milwaukee, La Crosse, and Oshkosh to offer a baccalaureate degree and post-baccalaureate program in diagnostic medical sonography. Students complete their pre-requisite course work at their sponsor university and their professional education at UWHC. Students elect to pursue one of two options; Echocardiography/Vascular Sonography or General/Vascular Sonography.

Under the management of the Program Director, Clinical Education Coordinator, Clinical Instructors, and staff, student sonographers experience clinical and didactic situations conducive to learning. Student sonographers grow in knowledge, ability, and as individuals, as they progress toward a career in the health profession.

UWHC School of Diagnostic Medical Sonography Faculty

Echocardiography/ Vascular Sonography Option

Peter S. Rahko MD
Medical Director

Michelle M. Cordio M.Ed., ACS, RDMS, RVT, RDCS
Program Director

Lindsey Thomas BS, RDCS, RVT
Clinical Education Coordinator

Steven Williams BS, RDCS, RVT
Cardiac Instructor

General/Vascular Sonography Option

Lori Mankowski Gettle MD
Medical Director

Michelle M. Cordio M.Ed., ACS, RDMS, RVT, RDCS
Program Director

Jami Parkins M.Ed., RDMS, RVT
Clinical Education Coordinator

Melinda Omata MBA, RDMS, RVT
Sonography Instructor

INSTITUTIONAL POLICIES

Academic Advising

All students are assigned to an academic advisor upon admission to their affiliate university and all new freshmen must meet with their advisor before they will be permitted to register for their first term. These requirements are subject to change, and if a student is unsure of the requirements for their program, they need to consult their advising office.

University Advisors:

Carroll University:
Lucinda Glaser (262) 524-7435

Edgewood College:
Brenda del Moral (608) 663 4283

Marian University:
Teri Durkin (920) 923-8526

Sean Fitzpatrick (920) 923-7677

UW-Milwaukee:
William Mueller (414) 229-2758

UW-La Crosse
Aileen Staffaroni (608) 785-6625

UW-Oshkosh
Mallory Janquart (920) 424-0678

Once students are accepted into the UWHC School of Diagnostic Medical Sonography, the program director and clinical education coordinator serve as academic advisors in conjunction with the assigned advisor from the UW-Milwaukee, La

Crosse, Oshkosh, Edgewood College, Marian University or Carroll University.

Admissions Policy

Admission - Committee

1. Program Director for the UWHC School of Diagnostic Medical Sonography.
2. General/ Vascular Sonography Clinical Education Coordinator for the UWHC School of Diagnostic Medical Sonography.
3. Echocardiography/ Vascular Sonography Clinical Education Coordinator for the UWHC School of Diagnostic Medical Sonography.
4. General/ Vascular Instructor for the UWHC School of Diagnostic Medical Sonography.
5. Cardiac Instructor for the UWHC School of Diagnostic Medical Sonography.

Admission - Qualifications

Admission to UWHC School of Diagnostic Medical Sonography is highly competitive and granted to a limited number of applicants each year. A diagnostic medical sonography student must be a mature, dependable person who is "people oriented" and genuinely interested in caring for individuals who are ill, injured, or disabled. All applicants are evaluated on the same basis regardless of race, sex, sexual orientation, handicap, religion, age, national origin, or veteran's status.

The following information offers a general description outlining the attributes of a successful candidate.

- Students must be in good health and physical condition in order to be capable of performing the duties required of a sonographer. Immunizations must be current.
- Applicants to the program must have attained the level, scope, and breadth of educational preparedness necessary to meet the demands of the rapidly evolving, highly technical, and diverse professional curriculum taught at UWHC School of Diagnostic Medical Sonography. Applicants must demonstrate an academic background that is strong in science and mathematics by completing the educational requirements as outlined on the following pages.
- **Prerequisite course work must be complete or in-progress by the application deadline with a passing grade. The applicant must have an overall GPA of at least 3.0 on a 4.0 scale.**
- Applicants must submit the \$50.00 application fee by check payable to the UWHC School of DMS by deadline set by the University or College at which the student is enrolled. The check should be submitted with all other application materials to the UW-M, Edgewood College, Marian University or Carroll University.
- Practical experience caring for the ill and injured is required as it prepares the student for clinical practice. Such experience is obtained through current CNA certification which is valid in one or more of the states in the U.S. (required), a minimum of 100 hours of documented patient care experience performed in nursing homes, hospitals, clinics, urgent care, or trauma centers and job shadowing in an ultrasound department (a minimum of 8 hours is required).
- Applicants must provide proof of current CPR certification from the American Heart Association or the American Red Cross, by the application deadline. CPR certification needs to include BLS (Basic Life Support) for Adults, Children and Infants. Students will be required to maintain current CPR certification throughout their clinical education at the UWHC School of DMS.
- **NOTE: CPR certification courses administered online will not be accepted.**

Applications that are complete and received by the deadline are reviewed, evaluated, and given a numerical score. Applications are scored based on past academic performance, accomplishments, references, work-related experience, and aptitude. The admission process is highly competitive due to the limited number of student positions available. Only those most qualified will be invited to proceed through each step of the selection process. Those applicants whose qualifications indicate the greatest potential for professional and personal development are selected for enrollment.

Admission - Requirements

To qualify for admission into the University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography, candidates must be enrolled as an undergraduate student at one of our university affiliates AND meet **ONE** of the following prerequisites.

PREREQUISITE #1

Enrolled at the Universities of Wisconsin – Milwaukee, La Crosse, or Oshkosh, Edgewood College, Marian University, or Carroll University in the diagnostic medical sonography sub major and have completed the following patient care prerequisites:

- Current Certified Nursing Assistant Certification (CNA)*, **or** documentation verifying that a waiver of the CNA requirement has been granted by the admissions committee of the UWHC School of Diagnostic Medical Sonography, based on extensive prior patient care experiences.
- Current CPR Certification in Adult, Child, and Infant through the American Heart Association or American Red Cross
- 100 hours of documented patient care experience.
- Completion of a *minimum* of 8 hours of job shadowing in ultrasound.

PREREQUISITE #2

Post-Baccalaureate Certificate Program in Diagnostic Medical Sonography

Candidates who wish to apply to the post-baccalaureate certificate program in Diagnostic Medical Sonography must comply with the following criteria:

- Currently enrolled in the Universities of Wisconsin - Milwaukee, LaCrosse, and Oshkosh.

- Earned a Bachelor of Science degree in Radiologic Technology (BSRT) within the past 5 years.
- Achieved a minimum cumulative GPA of 3.0 on a 4.0 scale (or equivalent) from the BSRT degree granting institution.
- Completed the 2-year clinical training in Radiologic Technology at a site affiliated with the UW–Milwaukee, La Cross, Oshkosh, Edgewood College, Marian University or Carroll University.
- Hold active certification as a registered Radiologic Technologist (ARRT credential RT(R)).

PLEASE NOTE: You must have been accepted to a Baccalaureate Program in a Diagnostic Medical Sonography by UW–Milwaukee, La Crosse, Oshkosh, Edgewood College, Marian University or Carroll University in order to be eligible to apply to the UWHC School of Diagnostic Medical Sonography. All application materials, including the \$50 application fee, should be submitted to the advising office of the college or university at which you are enrolled, no later than November 1st of each application year.

All applicants must complete the prerequisite course work specified by Universities of Wisconsin - Milwaukee, LaCrosse, and Oshkosh, Edgewood College, Marian University, Carroll University or equivalent course work from other accredited, post-secondary educational institutions. Any course work completed at institutions other than those listed above, must be evaluated for equivalency by the advising department at the college or university at which the applicant is enrolled.

Additionally, all applicants must have a minimum cumulative GPA of 3.0 on a 4.0 scale on all post-secondary coursework to qualify for admission.

***CNA WAIVER:** Applicants who feel they exceed the patient care requirement because of extensive direct patient care work experience may request a waiver of the CNA prerequisite. To do this, the applicant must send a letter to the School of DMS formally requesting a waiver. The request must include a description of the work done that the applicant believes satisfies the prerequisites, and documentation of the applicant's job duties and dates of employment. The Admissions Committee will vote and will notify the applicant of their

decision. The Admissions Committee's decision is final.

ADMISSIONS PROCEDURE

1. Applications that are complete and received by the application deadline are reviewed by a DMS faculty committee, scored, and the applicant is notified of his/her eligibility for interview. Incomplete applications will not be processed.
2. Prerequisite coursework must be complete or in-progress by the application deadline. Applicants must be able to provide proof of registration in any courses not completed by the application deadline to indicate the course will be completed before May 21st prior to the program start date.
3. The University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography will notify applicants when the application is complete.
4. Interviews will be conducted by the Admissions Committee which is comprised of all current faculty members for the UWHC School of DMS.
5. The interview will take place at the UWHC School of Diagnostic Medical Sonography at 610 N. Whitney Way, Suite 440, Madison, WI 53716. Interviews by the Admission Committee run approximately thirty minutes in length.
6. Those interviewed will receive an interview score. Applicants must receive a minimum average interview score from all interviewers to be admitted into the UWHC School of DMS.
7. The Admissions Committee will select students for the upcoming enrollment period. The number of students selected for the general/ vascular sonography option, and for the echocardiography/ vascular sonography option will vary between 6 and 10, based on current clinical site availability, for each option, per year.
8. All applicants will be notified via email whether they have been accepted into the program.
9. If accepted, the applicant is required to confirm or decline acceptance by the date stated in their acceptance letter. Accepted applicants not wishing to attend should notify the school immediately.
10. Students accepted into the program will receive additional information detailing their

orientation, clinical rotations, and academic course schedules.

11. Accepted students will be required to provide proof of CPR certification from the time of application through the end of the UWHC School of DMS program. Should CPR certification expire during that period, the applicant will be required to show proof of the renewed certification.
12. Applicants accepted to the UWHC School of Diagnostic Medical Sonography must submit a **non-refundable** \$100.00 enrollment fee to hold their place in the class for which they are accepted.

TIMETABLE

- **Applicants must submit all materials to UNIVERSITIES OF WISCONSIN - MILWAUKEE, LACROSSE, AND OSHKOSH, Edgewood College, Marian University or Carroll University by the deadline established by the University or College through which they are applying, each application year.**
- Qualified applicants will be notified for an interview no later than **March 1st of each year.**
- Applicants will be notified regarding acceptance no later than **April 15th of each year.**
- New Student Orientation begins **prior to the academic year.**

Advisory Board Policy

The advisory board is made up of the Program Director, Clinical Education Coordinators, Medical Directors, and a student representative from each class, clinical instructors from each site with an active affiliation agreement and one member from the general public.

The purpose of this board is to:

- Discuss changes in department and/or school policies and procedures
- Discuss problems students may have concerning their functioning in the department
- Discuss personnel problems concerning staff, students, physicians and other departments relating to the educational process
- Review academic and clinical education experiences
- Advice regarding curricular changes and additions

The advisory board shall meet two times per year.

Confidentiality

The UWHC School of DMS will follow the UWHC Corrective Action for Non-Compliance with Confidentiality of Protected Health Information. This policy is available for review on U-Connect and in the Program Director's office.

Grievance Policy

If a student wishes to appeal a decision of the faculty of the UWHC School of Diagnostic Medical Sonography for Academic or Disciplinary reasons, the following policy governs the process of student appeal or grievance procedure:

1. Within 21 days of the faculty decision, the student must submit in writing a request of formal appeal to the Chair of the Department of Radiology and the Program Director of the School of Diagnostic Medical Sonography. In the formal appeal the student must explain in which respects the decision is claimed to be arbitrary or unreasonable.
2. Within five working days after receipt of this formal appeal, the chairman will appoint an appeals board consisting of a radiologist or cardiologist, a department supervisor, a staff sonographer and a member of hospital administration as a consulting member. Members of the appeals board must not have been involved directly in the decision which is being appealed.
3. The appointed appeals board will schedule a hearing on the appeal within five working days. The student will be given at least five days advance notice of the scheduled hearing. Both the student and the faculty at this hearing may present all evidence pertinent to the dismissal action. A taped recording of the hearing will be made.
4. Within 10 working days after the hearing, the appeals board will render a decision in writing to the student and the faculty. The decision of the appeals board is final in all cases.

Faculty Grievance Policy

The UWHC School of Diagnostic Medical Sonography faculty members are employees of the UWHC. The Faculty follows the UWHC Employee Grievance Policy. This policy is available for review in the Program Director's office and on U-Connect.

Harassment Policy

The UWHC School of Diagnostic Medical Sonography students are to follow the UWHC policy on harassment. Policies are available for review on U-Connect and in the Program Director's office.

Infection Control Education Policy

All UWHC School of Diagnostic Medical Sonography Students are required to take the safety and infection control exam on an annual basis. This learning module and exam is offered every January. Any student not completing the safety and infection control exam by the due date will be removed from their clinical rotation until the exam is taken and a passing score is achieved. Any missed time must be made up at the end of the semester.

Library Resources

Students enrolled in the UWHC School of Diagnostic Medical Sonography have full access to all affiliate and UW-Madison campus libraries and reference librarians. For more information regarding campus libraries see <http://www.library.wisc.edu/>.

New Employee Orientation Policy

All students accepted into the UWHC School of Diagnostic Medical Sonography will participate in New Employee Orientation (NEO). The UWHC School of Diagnostic Medical Sonography follows the UWHC New Employee Orientation Policy. This is available on U-Connect and in the program director's office.

Records and Release of Information Policy

The release of information to and about students is in conformance with the Family Education Rights and Privacy Act, as amended 1975.

The official transcript of each student's grades is maintained by Universities of Wisconsin - Milwaukee, LaCrosse, and Oshkosh, Edgewood College, Marian University or Carroll University. Students must follow the transcript request policy of the college or university at which they are enrolled to obtain an official copy of their grades. The UWHC School of DMS maintains an unofficial grade record for each student.

Any information concerning the student's academic or clinical performance is confidential. The student or graduate must make authorization for release of any information in writing to the Program Director.

An individual student's examination record will be available for inspection by that student with the course instructor at any time mutually agreed upon by the student and the instructor. All student records are kept in the offices of the Program Director and Clinical Education Coordinator. Inspection of the student's records by an individual student will be permitted by appointment with the Program Director or Clinical Education Coordinator.

Student Records

All student records will be maintained in perpetuity. The past ten years are kept on site in a secured location. Prior records are stored at Access Information Management, Inc., and may be retrieved at any time.

Student Withdrawal Policy

A student desiring to withdraw from the program must submit to Program Director written notice stating the reason for withdrawal and giving an effective date. Failure to follow proper procedures will result in dismissal.

Technical Standards Physical Requirements

Applicants should be aware that:

1. Sonographers must have the ability to organize and accurately perform the individual steps of the ultrasound examination in proper sequence.
2. The sonographer is expected to examine patients who may have communicable diseases and/or other health problems
3. Sonographers must have the capability to be independently mobile.
4. Sonographers must have the hearing and visual acuity sufficient to perform ultrasound examinations, observe patients, read monitors, and document and hear equipment alarms.
5. Sonographers must have the ability to:
 - Transport patients from wheelchairs and patient carts to an examination table (to lift more than 50 pounds routinely).

- Sit/stand for prolonged periods of time.
- Work with arms routinely.
- Push and pull routinely.
- Kneel and squat routinely.
- Work within a limited space.
- Transport mobile ultrasound equipment to patient rooms, operating rooms, and research laboratories

ATTENDANCE AND LEAVE POLICIES

Timing in at Clinical Sites Policy

Clinical hours for specific sites are found on page 36, (please see list of clinical sites and hours for specifics). Students will clock in and out via MyTime. At the discretion of the Program Director or Clinical Education Coordinator, these hours may, on occasion, be modified so that students may attend an educational conference or to accommodate certain clinical sites. (See “Rules for Specific Clinical Sites”)

Students may not be absent during a clinical day unless there is a medical or personal emergency or illness. An excused absence will require documentation of the medical or personal emergency or illness. An illness will require a doctor’s note. If a student is going to absent for any reason, he/she must contact the Clinical Education Coordinator and the clinical site. Table 1 and 2 provide contact information for all clinical sites. Failure to do any of the above will result in an unexcused absence. Only 2 unexcused absences are allowed in the duration of the program. A third unexcused absence will result in dismissal from the program. **All** absences, excused or unexcused, will be made up on student breaks.

Tardiness will not be tolerated. Any time greater than 5 minutes late will be considered tardy. 5-points will be deducted from the clinical evaluation for each occurrence. Early clocking out (more than 5 minutes before 1630) will result in a 5-point deduction from the clinical evaluation for each occurrence. Students must maintain a passing clinical grade.

Students are required to time in and out electronically. Students will use their UW ID badge by swiping it whenever they are at the UW Hospital or UW Clinics (i.e. CSC, UW Health East Clinic, UW Health West Clinic, etc.). Students will time in via the phone belonging to the clinical site using the MyTime system when they are at sites that are not UWHC affiliates. The MyTime number is (608) 265 – 6500. When you call in, you must follow the prompts for a

proper use. Specific directions for this system will be handed out in orientation. The MyTime system is tracked by location. **Students cannot use their cell phones to clock in or out at any time.** Attempting to time in from any place other than your assigned clinical site will result in an automatic unexcused absence. Students that fail to clock in or clock out will have 5 points deducted from the clinical evaluation for each occurrence. If a student feels they have missed a clock in, or if a time malfunction has occurred, the student needs to email and/or call the appropriate Clinical Education Coordinator immediately.

If a student does not punch in or out on a clinical day, the student needs to contact the appropriate Clinical Education Coordinator to enter in the correct time. If the student contacts the Clinical Education Coordinator before 0830 for a missed punch in, or by 1700 for a missed punch out on the same day that it occurred, no point penalty will be given. Failure to do this will result in a 5-point deduction from the clinical evaluation.

Except when approved for early dismissal by their clinical instructor, students will never leave their clinical sites early for any reason except a medical emergency or illness that is excused with a doctor’s note. An emergency or illness requires phone notice to the Clinical Education Coordinator or Program Director at the time of the occurrence to be considered excused. (see Approval for Early Dismissal Policy)

Inclement Weather Policy

In the event of inclement weather UWHC School of DMS students will **not** need to attend face to face courses or clinical rotations. Online classes will be at the discretion of the faculty. Factors that will force the closure of the school will be a combination of area schools being closed due to inclement weather and the school following the UWHealth Inclement Weather Policy found on Uconnect. A decision will be made by 6:00 am. The program director will inform the students

and faculty regarding the school closure, via Twitter or email.

If a student ever feels unsafe traveling to a clinical site, they may contact their clinical education coordinator for an alternative clinical placement for the day. The student will be responsible for contacting the original clinical site prior to their start time. If an alternative clinical site cannot be assigned the student will not be penalized for missing the day but they will make up the clinical hours missed at a later date, following the UWHC School of DMS absence policy.

Absence Request Policy

If a student has a planned absence or is absent due to emergency or illness, all students must fill out an Absence Request Form. For a planned absence, the student must submit this form to their clinical coordinator prior to the absence. For all other absences, completed forms must be submitted via email, fax, or by hand-delivery to the clinical education coordinator at the program offices at 610 N. Whitney Way, Suite 440, within 14 days of absence. The Absence Request form can be found under the College of Allied Health Sciences Diagnostic Medical Sonography course shell on Canvas.

Acceptable Planned Absences

- Scheduled to Appear in a Court of Law
- Incarceration
- Urgent Medical Need (i.e. an appointment to address an acute condition).
- Requirements for Armed Forces Service

All requests will be reviewed by the clinical education coordinator and will be determined on a case-by-case basis.

Approval for Early Dismissal Policy

If a student is dismissed from a clinical site earlier than the required end time, the student will need to report to the School of DMS office and will be engaged in a learning activity (additional scanning time, didactic assignment, etc.). Contact your clinical education coordinator for instructions. Students may be rotated to another site.

If a student requires an early dismissal time for a medical reason, documentation of the medical

reason must be given to the appropriate clinical education coordinator and arrangements to make up the missed clinical time should be made in advance (if possible), using the Absence Request Form.

Leave of Absence Policy

In the event that a student needs to take a leave of absence during the course of the 24 months program, to the extent that it prohibits them from participating in clinical education activities for a period of prolonged time: 30 days minimum, the student needs to request, in writing a leave of absence.

All time must be made up prior to graduation. Leave of absence requests will be granted on a case by case basis. Based on the leave of absence request, the student may be dropped from the program with eligibility to be readmitted in proper academic and clinical sequencing in the following year. The student's readmission and date of program completion will be determined by the Admissions Committee.

If a need for a leave of absence occurs in the first three months of the program, the student must reapply for admission to the School in the class starting the following year.

CPR Policy

Current CPR certification by the American Medical Association or the American Red Cross in the areas of Adult, Child, and Infant Basic Life Support, must be maintained by each student for the entire duration of their 2 years in the UWHC School of DMS. Online CPR certifications will not be accepted for admission to the school or renewal.

It is the student's responsibility to stay up to date on their CPR requirements. If a student's certification expires during the program, that student will not be allowed to perform clinical rotations, effective immediately. The student will need to make arrangements to attend a renewal or recertification course as soon as possible and will need to make arrangements with their clinical coordinator to make up any clinical time that is missed. The student will need to fill out an absence request form for any days missed, due to CPR certification lapses.

Disability Policy

In the event that a student becomes disabled during the course of the 24 months program to the extent that it prohibits them from participating in clinical education activities for a period of prolonged time: 30 days minimum, the student will be dropped from the program with eligibility to be readmitted in proper academic and clinical sequencing in the following year. The student's readmission and date of program completion will be determined by the Admissions Committee.

If such a disability occurs in the first three months of the program, the student must reapply for admission to the School in the class starting the following year.

Pregnancy Policy

Students have the option to declare their pregnancy in writing to the Program Director. Without written notification, the student is not considered pregnant.

If delivery occurs during training, all course work and clinical time must be completed before the student is eligible for graduation. The School cannot guarantee normal program completion time if a pregnancy occurs during training.

Student is to be re-admitted only after physician's approval. Re-entry of the student is evaluated on an individual basis.

Work Stoppage Policy

In the event that the University of Wisconsin Hospital and Clinics Department of Radiology is unable to continue to function in a normal or routine manner because of a strike or work stoppage by the sonographers, the School of Diagnostic Medical Sonography will temporarily cease operation until such time as the requirements of clinical education by the Joint Review Committee on Diagnostic Medical Sonography can again be met. Students may not be used in place of sonographers. The School is not responsible for time lost due to strike or work stoppage. Every effort will be made upon resumption of normal department activities to complete student's clinical education requirements in a timely manner.

E-Mail Policy

Students will be assigned a UW Health email account upon the successful completion of onboarding requirements for the program. Students will be expected to check their UW Health email accounts regularly for updates and reminders. The UW Health email account will be the primary means of correspondence between the faculty, program support staff and the students. Failure to regularly check the UW Health email account and respond may result in missed deadlines and non-compliance with hospital safety and infection control requirements. The student will be fully responsible for any penalties associated with the failure to check their UW Health email account for updates and requirement reminders.

Vacation Policy

Students enrolled in the University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography will have scheduled semester breaks.

Vacation time will not be granted to students while UWHC School of DMS classes are in-session.

Voluntary Scan Lab Consent/Incidental Findings Policy

All UWHC School of Diagnostic Medical Sonography Students are required to sign the Voluntary Scan Lab Consent Form at the beginning of their education prior to the first scan lab.

Function of the voluntary scan lab:

1. Voluntary scan labs are defined as supervised clinical education where one student will scan another student or phantom using ultrasound equipment at the clinical sites. Through participation as a volunteer, students have an opportunity to obtain practical scanning experience prior to scanning patients.
2. Voluntary scan labs are supervised by program instructors.

Incidental findings will be documented, and form will be completed by a program instructor in the scan lab. The findings and the form will be sent to the Medical Director. The Medical Director will review the findings, images, and make a recommendation to the student when to seek medical attention.

Holiday Policy

The following days are official UWHC School of DMS Holidays.

January 1

Martin Luther King Day

Memorial Day

July 4

Labor Day

Thanksgiving Day

The day after Thanksgiving Day

December 24

December 25

Bereavement Policy

Students will be granted up to three days funeral leave for the death of an immediate family member. The immediate family shall be considered to be the husband or wife, parents, sibling, children, grandparents, mother-in-law, father-in-law, stepparents, stepbrothers, stepsisters, half-brothers, or half-sisters. In the event that another relative would hold the same close relationship, special approval granting leave of absence may be acquired from the Program Director and the Clinical Education Coordinator. Students must fill out an absence request form when taking time off for bereavement purposes.

Service - Work Policy

Students will not, under any circumstance, be allowed to be paid for work as a sonographer during required clinical hours. Students may work outside of the requirements of the program, as sonography students, only during semester breaks, after clinical hours, or on weekends. Work done as a sonography student during semester breaks will not count toward the clinical hour requirements for the program. Please refer to the DMS Handbook (Page 15)

Student Background Checks, Ongoing Reporting, ARDMS Pre-Screening Policy

All students accepted into the UWHC School of Diagnostic Medical Sonography are required to follow the UWHC new employee onboarding policies, listed on page 39. Students are required to complete the Background

Information Disclosure (BID) form. UWHC will check work authorization, criminal background, federal health care reimbursement sanctions and exclusions, and work experience; and may check licensure/certification, and other information, as appropriate for the position. All offers are contingent upon successful completion of these checks.

Students have an ongoing obligation to inform the program director if they are arrested or convicted of a crime. Students have three working days to report their offense. If not reported within the allotted time the student may be subject to disciplinary action that may result in expulsion from the School of Diagnostic Medical Sonography.

All UWHC School of DMS students will follow the ARDMS pre-screening and compliance policies if necessary. These policies can be found at ardms.org. During orientation students will inform the program director if needed. It is the student's responsibility to follow the above policy once in the program.

Interview Policy for Senior Students UWHC School of DMS

Beginning in the spring semester (semester 5) of students' senior year, senior students may be eligible to interview for employment opportunities as registered sonographers without making up clinical rotation time, if they meet the following criteria:

1. Have earned at least one of the following credentials by passing the ARDMS board examinations (RDMS, RDCS or RVT).
2. Are not currently rotating to a clinical site where they are attempting to complete either required clinical competencies or exam numbers.
3. The requests for time off does not exceed 16 total hours within one semester.

Requests that do not meet all the above criteria may either be denied or be reviewed on a case by case basis at the discretion of the program faculty. Any request that is reviewed on a case by case basis must be approved by the Clinical Education Coordinator of the appropriate track or the request will be denied.

ACADEMIC POLICIES

Grading and Evaluation

Academic Standards – Clinical Course Policy

The University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography has the following grading scale in place for all clinical and academic courses:

92%-100% - A

85%-92% - B

80%-84% - C

74%-79% - D

Below 74% - F

It is the policy of the school to not round grades up.

The University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography establish minimum standards for undergraduate students enrolled in the general sonography and echocardiography options. A student whose clinical course (Clinical Education I, Clinical Education II, Clinical Education III, Clinical Education IV, Clinical Education V, Clinical Education VI) grade point average (GPA) falls below a 2.000 will be subject to the following academic actions.

- **Clinical Probation:** Imposed on students whose clinical course (Clinical Education I, Clinical Education II, Clinical Education III, Clinical Education IV, Clinical Education V, Clinical Education VI) GPA falls below 2.000 at any time period in the program will be placed on clinical probation.
- **Cleared Probation:** Achieved when clinical course GPA increases to 2.000 or above.
- **Dropped from School of Diagnostic Medical Sonography:** Imposed on any student on clinical probation who fails to earn a semester clinical course GPA of 2.000 after additional clinical objectives have been given during the clinical probation time period. **Also imposed on any student who is on clinical or academic probation OR a combination of the two, more than twice in any single academic year.**
- **Reinstatement/Readmission:** A student dropped from School of Diagnostic Medical Sonography may contact their sponsor university to discuss academic options.

Academic Standards – Didactic Course Policy

The University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography has the following grading scale in place for all clinical and academic courses:

92%-100% - A

85%-92% - B

80%-84% - C

74%-79% - D

Below 74% - F

It is the policy of the school to not round grades up.

The University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography have established minimum standards for undergraduate students enrolled in the general sonography and echocardiography options. A student whose grade falls below a 2.000 in any course will be subject to the following academic actions:

- **Academic Probation:** Imposed on students whose course grade falls below 2.000 at any point in the program. The student on academic probation who is not able to achieve a course grade of a “C” (2.0) or better will be dismissed from the program.
- **Cleared Probation:** Achieved when the course grade increases to 2.000 or above.
- **Dropped from School of Diagnostic Medical Sonography:** Imposed on any student on academic probation who fails to earn a course grade of a “C” (2.0) or better. **Also imposed on any student who is on either academic or clinical probation OR a combination of the two, more than twice in any single academic year.**
- **Reinstatement/Readmission:** A student dropped from School of Diagnostic Medical Sonography may contact their sponsor university to discuss academic options.

Academic Standards - Incompletes

You may be given an incomplete if you have carried a subject successfully until near the end of the semester but, because of illness or other unusual and substantiated cause beyond your control, have been unable to take or complete the final examination or to complete some limited amount of course work. An incomplete is

not given unless you prove to the instructor that you were prevented from completing the course requirements for just cause as indicated. Students enrolled in the University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography are required to complete a course marked incomplete prior to the end of the next succeeding semester. If you do not remove the incomplete during this period, the report of 'I' will lapse to 'F.'

Academic Standards – Repeating Courses

Students enrolled in the University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography are not allowed to repeat a course. All courses must be passed, in proper sequence, with a letter grade of 'C' or better to graduate.

Academic Standards – Graduation Requirements

Students enrolled in the University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography must fulfill the following requirements:

1. Complete all didactic courses with a letter grade of 'C' or better.
2. Complete all clinical competencies with a letter grade of 'C' or better.
3. Complete all clinical rotations with a grade of 'C' or better.
4. Complete all clinical courses with a letter grade of 'C' or better.
5. All tuition and fees are paid in full.
6. All library materials are returned.
7. All missed time must be made up.

Accreditation

The University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) www.caahep.org.
 25400 US Highway 19 North Suite 158
 Clearwater, FL 33763 P: 727-210-2350
 F: 727-210-2354

Attendance

Students are expected to attend all classes and clinical rotations. In case of emergency the student will need to notify the program director, clinical education coordinator and clinical site that they will be absent. All missed time must be made up on semester breaks. All missed time must be made up prior to graduation. If an absence is requested, the student will need to complete an absence request form.

Certification

University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography graduates are eligible to take certification examinations offered by the American registry of Diagnostic Medical Sonographers (ARDMS).

All students are required to sit for the ARDMS SPI exam prior to fall semester of their senior year.

Academic Calendar

University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography, see below for the 2020 – 2022 calendars:

Semester	2020-2021	2021-2022
Fall	August 31, 2020 through December 18, 2020	August 31, 2021 Through December 17, 2021
Spring	January 19, 2021 through May 14, 2021 Spring Break- Week of March 27th	January 18, 2022 Through May 13, 2022 Spring Break-week of March 14th
Summer	June 14, 2021 through August 6, 2021	June 13, 2022 Through August 5, 2022

Echocardiography/ Vascular Option

Program Goals

It is the goal of the UWHC School of Diagnostic Medical Sonography Program Echocardiography Option to prepare competent entry-level adult cardiac and vascular sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Graduates of the program will be able to utilize the equipment necessary in the operation of an echocardiography department and the production of high-quality diagnostic echocardiograms.

Echocardiography Objectives

Knowledge of cross-sectional and three-dimensional anatomy is critical to the performance and interpretation of ultrasound examinations; therefore, the echocardiography curriculum stresses anatomy, physiology, hemodynamics, and pathology. In addition to anatomy, the knowledge of ultrasound physics is also critical to the performance of ultrasound examinations and the generation of diagnostic medical images. Students are required to take the course Medical Ultrasound Principles and Apparatus. The class teaches the fundamental physical principles upon which diagnostic medical ultrasound is based and in-depth explanations of how physics is manipulated by ultrasound equipment to create images.

The echocardiography curriculum covers ultrasound imaging of the heart in a variety of different ways including transesophageal, transthoracic, and introduction to stress echocardiograms on both adult and pediatric patient populations. Students are also exposed to the basic principles of fetal echocardiography as these patients tend to be followed by echo cardiographers as neonates. In addition to attending formal classes, students often have an opportunity to attend physician lectures, cardiology conferences, and interesting case readout sessions conducted by cardiologists.

Upon completion of the UWHC School of Diagnostic Medical Sonography Program the student will be able to:

1. Conduct themselves in a courteous and professional manner while in the hospital and clinical environment.
2. Identify and describe sonographic terminology and use the terminology in an effective manner.
3. Employ the use of medical terminology and abbreviations pertinent to diagnostic medical ultrasound.
4. Identify and perform appropriate nursing care procedures and techniques used in the general care of patients in various states of health and various conditions demanding special needs.
5. Demonstrate knowledge of the physical principles of diagnostic medical ultrasound and their applications to the clinical environment
6. Describe the principles and applications of Doppler ultrasound.
7. Manipulate the technical controls on the equipment used in the ultrasound department to produce an optimum image for diagnostic purposes.
8. Record and process for display the images necessary for a diagnostic medical ultrasound examination.
9. Identify the biological effects of diagnostic medical ultrasound and take the necessary precautions to avoid excessive exposure of ultrasound in patients.
10. Demonstrate the appropriate skills in performing a quality assurance test.
11. Demonstrate the ability to apply knowledge of cross-sectional anatomy to diagnostic echocardiography ultrasound images.
12. Describe the process of imaging the heart and great vessels utilizing diagnostic ultrasound.
13. Describe the principles and applications of Doppler ultrasound.
14. Demonstrate the skills necessary to perform and echocardiogram of the adult heart and pediatric heart.
15. Identify normal and pathological conditions on an echocardiogram.
16. Assist the attending physician/sonographer in the differential diagnosis process of a pathological entity.
17. Describe the principles and applications of stress echocardiography.
18. Describe the principles and applications of transesophageal echocardiography.
19. Demonstrate the ability to maintain a sterile field while assisting with an invasive ultrasound study.

Echocardiographer Role as a Healthcare Professional

The echo cardiographer is a health care professional who performs diagnostic ultrasound examinations of the heart under a physician's supervision. Echocardiographers are required to integrate medical knowledge of cross-sectional and three-dimensional anatomy, physiology, pathology and ultrasound physics to imaging patients in the clinical setting.

Echocardiographers work within the framework of an examination protocol where he/she must exercise judgment to tailor each examination to the individual patient's needs. The interaction between ultrasound and a patient's body tissues requires the constant adjustment of techniques and procedures during the examination.

Therefore, the echo cardiographer must be able to understand the interaction between ultrasound physics, anatomy, pathology, and equipment manipulation to produce diagnostic medical images that provide comprehensive information about the patient's specific pathology.

Most echo cardiographers work in echocardiography departments located within a hospital; however, many others prefer to work in outpatient clinics, doctor's offices, and mobile medical imaging services where ultrasound examinations are performed on a strictly outpatient basis. Non-clinical positions are available with medical imaging equipment manufacturers who employ echo cardiographers to test ultrasound equipment and function as application specialists to teach new technologies to clinical sonographers.

Echocardiography Standards

1. The school will accept as students, applicants who exhibit by past education, experience and personal interview a high potential for success in diagnostic medical sonography. The grade point average shall be a minimum of 3.0 on a 4.0 scale in previous academic work. Faculty and staff employed by the University of Wisconsin Hospital & Clinics including the Program Director, Clinical Education Coordinator, and lead workers in the Radiology Department Ultrasound Division and Cardiology Department shall serve on the admissions committee.
2. Students will learn and understand concepts related to the art and science of diagnostic medical sonography and be able to apply them to clinical situations.
3. Students will communicate effectively with patients and provide care for their physical, emotional, and educational needs.
4. Students will learn to function and communicate effectively as an essential member of the diagnostic medical sonography team.
5. Students will develop ethical and moral practices consistent with the institution's policies as well as the Code of Ethics upheld within the field of Diagnostic Medical Sonography.
6. Students will develop critical thinking skills and will apply them in the classroom and the clinical situations. The Program Director will evaluate all course and clinical grades at the end of each quarter. A minimum grade of "C" in all academic courses and clinical practices is the required standard.
7. Students will demonstrate punctuality, dependability, initiative, and adaptability in their classroom and clinical performance.
8. Graduates will successfully pass the ARDMS examinations.
9. Graduates and employers will exhibit a high degree of satisfaction with the educational experience in postgraduate and employer surveys.
10. Graduates will continue their education to remain abreast of new developments in diagnostic medical sonography.

Echocardiography Course Schedule

Junior Year Fall Semester

Introduction to Diagnostic Medical Sonography
Cardiovascular Physiology
Cardiovascular Principles
Vascular Sonography I
Echocardiography Clinical Education I

Junior Year Spring Semester

Sonographic Physics & Instrumentation
Embryology of the Heart
Adult Echocardiography I
Vascular Sonography II
Echocardiography Clinical Education II

Junior Year Summer Semester

Pediatric Echocardiography I
Adult Echocardiography II
Echocardiography Clinical Education III

Senior Year Fall Semester

Adult Echocardiography III
Pediatric Echocardiography II
Vascular Sonography III
Stress Echocardiography
Echocardiography Clinical Education IV

Senior Year Spring Semester

Seminar in Advanced Medical Imaging
Seminar in Management and Education
Seminar in Professional Development
Echocardiography Clinical Education V

Senior Year Summer Semester

Special Procedures in Echocardiography
Echocardiography Clinical Education VI

Student Awards

The John Parks Award is an annual award presented to the students with the highest overall grade in the general/ vascular sonography and echocardiography/ vascular options.

The Carol C. Mitchell Outstanding Clinical Student award is presented to the students who receive the highest number of votes from the clinical instructors in the general/ vascular and echocardiography/ vascular options.

Each year the graduating students are asked to vote for an outstanding clinical educator in each discipline (General/ Vascular and Echo/ Vascular). The clinical educators selected by the students are awarded the Gregory L. Spicer Outstanding Clinical Educator Award by the graduating class.

Echocardiography Course Descriptions

NOTE: Course titles may vary based on the sponsor university, but content remains the same.

INTRODUCTION TO DIAGNOSTIC MEDICAL SONOGRAPHY

Course Description:

In this course the student will prepare for the new and challenging demands of sonography training in a hospital. Clinical policies and procedures are emphasized. Course content includes materials emphasizing personal adaptation skills and staff development issues, nursing procedures, ethics, and skills to become a better student. An overview of basic sonographic terminology, technique and equipment form the framework for future study. There is a lab component. A final written and practical exam is given. The student will have the opportunity to demonstrate their knowledge of sterile technique.

ADULT ECHOCARDIOGRAPHY I - VALVULAR HEART DISEASE

Course Description:

This course will discuss cardiac anatomy and physiology, prosthetic valves, diastology, and cardiac valvular pathology seen on echocardiograms in the adult population.

ADULT ECHOCARDIOGRAPHY II - CARDIOMYOPATHIES

Course Description:

This course will discuss cardiac pathology seen on echocardiograms in the adult population, to include cardiomyopathies (hypertrophic, dilated, restrictive), pericardial disease, endocarditis, and cardiac masses.

ADULT ECHOCARDIOGRAPHY III – ADVANCED PATHOLOGY

Course Description:

This course will discuss cardiac anatomy and pathology as it is seen on echocardiography. This course will focus on intraoperative cardiac ultrasound, congenital heart disease in the adult, and guidance for invasive procedures and contrast echocardiography.

CARDIOVASCULAR PHYSIOLOGY

Course Description:

This course will discuss cardiac physiology, mechanical events, timing of mitral and aortic flow, auscultation, phonocardiography, hemodynamics and Doppler applications to echocardiography, Doppler methods and formulas, concepts of dP/dt , index of myocardial performance and evaluation of LV systolic and diastolic filling.

CARDIOVASCULAR PRINCIPLES

Course Description:

This course will discuss cardiovascular anatomy, ultrasound image orientation, scan planes, routine views, sonographic anatomy, the normal ultrasound exam protocol for the echocardiogram, left ventricle function indicators, hemodynamics and Doppler applications to echocardiography, spectral Doppler measurements, indirect measurements, Doppler methods, right heart pressures, and introductory echocardiography findings in the following disease states; aortic stenosis, aortic regurgitation, mitral stenosis and mitral regurgitation assessment. Students will complete both a didactic and practical final exam.

ECHOCARDIOGRAPHY CLINICAL EDUCATION I

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum I include adult echocardiography. During this practicum, students will be assigned clinical competencies and objectives to complete.

ECHOCARDIOGRAPHY CLINICAL EDUCATION II

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum II include ultrasound imaging of the adult heart. During this practicum, students will be assigned competencies and objectives to complete.

ECHOCARDIOGRAPHY CLINICAL EDUCATION III

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum III include imaging of adult and pediatric heart. During this practicum, students will be assigned clinical competencies and objectives to complete.

ECHOCARDIOGRAPHY CLINICAL EDUCATION IV

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum IV include imaging of the adult heart, pediatric heart and vascular technology. During this practicum, students will be assigned clinical competencies and objectives to complete.

ECHOCARDIOGRAPHY CLINICAL EDUCATION V

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum V include imaging of the adult heart, pediatric heart and vascular technology. During this practicum, students will be assigned clinical competencies and objectives to complete.

ECHOCARDIOGRAPHY CLINICAL EDUCATION VI

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum VI include imaging of the adult heart, pediatric heart and vascular technology. During this practicum, students will be assigned clinical competencies and objectives to complete.

SONOGRAPHIC PHYSICS AND INSTRUMENTATION

Course Description:

The purpose of this course is to enable students to become familiar with the physical principles governing the of medical ultrasound equipment. Emphases will be on diagnostic imaging systems, but students also will become acquainted with therapeutic devices, including shock wave as well as thermal delivery systems. Basic principles of acoustic transmission and reflection in tissues are covered at an elementary level. Design and performance of transducers, pulse-echo imaging equipment, Doppler and color flow equipment and physical therapy systems are emphasized. The physics leading to image artifacts is described, as are methods for evaluating performance of ultrasound devices. Finally, acoustical exposure measurements and levels from diagnostic equipment are discussed, as well as biological effects and risk.

EMBRYOLOGY OF THE HEART

Course Description:

This course is a study of the development of the cardiovascular system and the pediatric heart to include normal anatomy and congenital heart disease. This course will cover embryology of the heart, the pediatric echocardiography exam and protocols and congenital heart disease.

PEDIATRIC ECHOCARDIOGRAPHY I

Course Description:

This course will introduce the student echo cardiographer to various types of congenital heart disease. The types of congenital heart disease to be discussed in this course are; Patent Ductus Arteriosus (PDA), atrial septal defect (ASD), ventricular septal defect (VSD), pulmonic stenosis (PS), coarctation of the aorta, transposition of the great arteries (TGA), double outlet right ventricle (DORV) and double outlet left ventricle.

PEDIATRIC ECHOCARDIOGRAPHY II

Course Description:

This course will introduce the student echo cardiographer to various types of congenital heart disease. The types of congenital heart disease to be discussed in this course are; univentricular heart, right ventricular hypoplasia, left ventricular hypoplasia, inflow anomalies, outflow anomalies, total anomalous pulmonary venous return and coronary artery anomalies, conotruncal anomalies, abnormalities within the cardiac chambers, proximal vessels and thorax, cardiomyopathies, postoperative evaluations and complex combinations of previously discussed congenital heart defects.

SPECIAL PROCEDURES IN ECHOCARDIOGRAPHY

Course Description:

This course will discuss the indications, utility, limitations and technical procedures related to transesophageal echocardiography and other interventional procedures.

VASCULAR SONOGRAPHY I

Course Description:

Hemodynamics of the arterial and venous vasculature will be discussed. Lower extremity venous normal and abnormal will be discussed. Extracranial and intracranial cerebrovascular anatomy, normal and abnormal will be discussed. Students will become familiar with the clinical symptoms and specific ultrasound protocols for normal and abnormal cases associated with lower extremity venous and cerebrovascular disease.

VASCULAR SONOGRAPHY II

Course Description:

Peripheral Vascular direct and indirect lower extremity arterial and upper extremity venous, normal and abnormal will be discussed. Students will become familiar with the clinical symptoms and specific ultrasound protocols for normal and abnormal cases associated with peripheral vascular disease.

VASCULAR SONOGRAPHY III

Course Description:

A review of hemodynamics, abdominal, penile, and transplant organ Doppler, and vascular statistics will be discussed. Students will become familiar with the clinical symptoms and specific ultrasound protocols for normal and abnormal cases associated with vascular disease involving the above areas of interest.

SEMINAR IN ADVANCED MEDICAL IMAGING

Course Description:

The student will be exposed to normal anatomy and pathology cases combining diagnostic medical sonography, computed sonography and magnetic resonance imaging. The student will also be exposed to techniques and protocols for obtaining 3D and 4D images of various anatomic structures. The student will gain an understanding how a diagnosis is made, and patients are managed based on findings from multiple imaging modalities.

SEMINAR IN MANAGEMENT AND EDUCATION

Course Description:

This course will familiarize the diagnostic medical sonography with educational and management issues in the profession. Students will problem solve management issues as they relate to diagnostic medical sonography and will explore educational strategies employed in ultrasound education. Students will participate in department quality assurance projects and educational course development projects.

SEMINAR IN PROFESSIONAL DEVELOPMENT

Course Description:

This course will familiarize the diagnostic medical sonography student with the history of the profession and professional societies associated with the field of diagnostic medical sonography. Students will learn how to be a professional and how to positively influence the field of diagnostic medical sonography. Students will also become familiar with resume creation and interviewing techniques.

General / Vascular Sonography Option

Program Goals

It is the goal of the UWHC School of Diagnostic Medical Sonography Program General / Vascular Option to prepare competent entry-level general and vascular sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Graduates of the program will be able to utilize the mechanical equipment used by ultrasound departments to produce high-quality diagnostic sonograms.

General Sonography Objectives

Knowledge of cross-sectional and three-dimensional anatomy is critical to the performance and interpretation of ultrasound examinations, therefore the general sonography curriculum stresses anatomy, physiology, hemodynamics, and pathology. In addition to anatomy, the knowledge of ultrasound physics is also critical to the performance of ultrasound examinations and the generation of diagnostic medical images. Students are required to take the course Medical Ultrasound Principles and Apparatus. The class teaches the fundamental physical principles upon which diagnostic medical ultrasound is based and in-depth explanations of how physics is manipulated by ultrasound equipment to create images.

The general sonography curriculum covers ultrasound imaging in obstetrics and gynecology, evaluation of the abdomen, thyroid, scrotum, prostate, and neurosonography. The vascular section includes evaluation of the major blood vessels of the neck, brain, abdomen, and extremities. In addition to attending formal classes, students often have an opportunity to attend physician lectures and conferences on ultrasound-related topics.

Upon completion of the UWHC School of Diagnostic Medical Sonography Program the student will be able to:

1. Conduct themselves in a courteous and professional manner while in the hospital and clinical environment.
2. Identify and describe sonographic terminology and use the terminology in an effective manner.
3. Employ the use of medical terminology and abbreviations pertinent to diagnostic medical ultrasound.
4. Identify and perform appropriate nursing care procedures and techniques used in the general care of patients in various states of health and various conditions demanding special needs.
5. Demonstrate knowledge of the physical principles of diagnostic medical ultrasound and their applications to the clinical environment.
6. Describe the principles and applications of Doppler ultrasound.
7. Manipulate the technical controls on the equipment used in the ultrasound department to produce an optimum image for diagnostic purposes.
8. Record and process for display the images necessary for a diagnostic medical ultrasound examination.
9. Identify the biological effects of diagnostic medical ultrasound and take the necessary precautions to avoid excessive exposure of ultrasound in patients.
10. Demonstrate the appropriate skills in performing a quality assurance test.
11. Demonstrate the ability to mentally transform gross anatomy to cross-sectional anatomy relative to diagnostic medical ultrasound.
12. Demonstrate the skills necessary to perform an ultrasound examination of any abdominal and pelvic organs, the gravid uterus, neurosonography, superficial structures and vascular hemodynamics routinely examined in a diagnostic ultrasound department.
13. Identify normal and pathological conditions on a sonogram of the abdominal and pelvic organs, the gravid uterus, neurosonography, superficial structures, and vascular structures routinely examined in the diagnostic medical ultrasound department.
14. Assist the attending physician/sonographer in the differential diagnosis process of a pathological entity.
15. Demonstrate the ability to maintain a sterile field while assisting with an invasive ultrasound study.

General Medical Sonographer Role as a Healthcare Professional

Diagnostic medical sonography uses ultrasound, or high frequency sound waves, to characterize and diagnose diseases in body organs and tissues. The use of ultrasound in medical diagnosis has become widespread in recent years. Among the parts of the body most commonly evaluated with ultrasound are the heart, blood vessels, abdominal organs, pelvic organs, and the gravid uterus.

The diagnostic medical sonographer is a health care professional who performs diagnostic ultrasound examinations under a physician's supervision. Sonographers are required to integrate medical knowledge of cross-sectional and three-dimensional anatomy, physiology, pathology, and ultrasound physics to imaging patients in the clinical setting. Sonographers work within the framework of an examination protocol where he/she must exercise judgment to tailor each examination to the individual patient's needs. The interaction between ultrasound and a patient's body tissues requires the constant adjustment of techniques and procedures during the examination. Therefore, the sonographer must be able to understand the interaction between ultrasound physics, anatomy, pathology, and equipment manipulation to produce diagnostic medical images that provide comprehensive information about the patient's specific pathology.

Most sonographers work in hospital-based radiology departments performing abdominal, pelvic, and vascular examinations or in cardiology (i.e. echocardiography) departments performing cardiac and vascular examinations in emergency, operating room, inpatient, and outpatient situations. However, vascular surgery departments and obstetric departments can also employ sonographers who perform specialized ultrasound examinations tailored to follow specific protocols needed in those specialties. Many sonographers prefer to work in outpatient clinics and mobile medical imaging services where ultrasound examinations are performed on a non-emergency basis. Non-clinical positions are available with medical imaging equipment manufacturers who employ sonographers to test ultrasound equipment and function as application specialists to teach new technologies to clinical sonographers.

General Sonography Standards

1. The school will accept as students, applicants who exhibit by past education, experience and personal interview a high potential for success in diagnostic medical sonography. The grade point average shall be a minimum of 3.0 on a 4.0 scale in previous academic work. Faculty and staff employed by the University of Wisconsin Hospital & Clinics including the Manager of Education and Training for the Department of Radiology, Program Director, Clinical Education Coordinator, and lead workers in the Radiology Department Ultrasound Division and Cardiology Department shall serve on the admissions committee.
2. Students will learn and understand concepts related to the art and science of diagnostic medical sonography and be able to apply them to clinical situations.
3. Students will communicate effectively with patients and provide care for their physical, emotional, and educational needs.
4. Students will learn to function and communicate effectively as an essential member of the diagnostic medical sonography team.
5. Students will develop ethical and moral practices consistent with the institution's policies as well as the Code of Ethics upheld within the field of Diagnostic Medical Sonography.
6. Students will develop critical thinking skills and will apply them in the classroom and the clinical situations. The Program Director will evaluate all course and clinical grades at the end of each semester. A minimum grade of "C" in all academic courses and clinical practices is the required standard.
7. Students will demonstrate punctuality, dependability, initiative, and adaptability in their classroom and clinical performance.
8. Graduates will successfully pass the ARDMS examinations.
9. Graduates and employers will exhibit a high degree of satisfaction with the educational experience in postgraduate and employer surveys.
10. Graduates will continue their education to remain abreast of new developments in diagnostic medical sonography.

General Sonography Course Schedule

Junior Year Fall Semester

Introduction to Diagnostic Medical Sonography
Abdominal Sonography I
OB/GYN Sonography I
Vascular Sonography I
Sonography Clinical Education I

Junior Year Spring Semester

Sonographic Physics and Instrumentation
Abdominal Sonography II
OB/GYN Sonography II
Vascular Sonography II
Sonography Clinical Education II

Junior Year Summer Semester

Specialized Sonography
OB/GYN Sonography III
Sonography Clinical Education III

Senior Year Fall Semester

Abdominal Sonography III
Seminar in OB/Gyn/ Introduction to Fetal
Echocardiography
Vascular Sonography III – Abdominal Vasc.
Sonography Clinical Education IV
Introduction to Neurosonography

Senior Year Spring Semester

Seminar in Advanced Medical Imaging
Seminar in Management and Education
Seminar in Professional Development
Sonography Clinical Education V

Senior Year Summer Semester

Sonography Clinical Education IV
Introduction to Musculoskeletal Sonography

Student Awards

The John Parks Award is an annual award presented to the students with the highest overall grade in the general/vascular sonography and echocardiography/vascular sonography options.

The Carol C. Mitchell Outstanding Clinical Student award is presented to the students who receive the highest number of votes from the clinical instructors in the general/ vascular and echocardiography/ vascular options.

Each year the graduating students are asked to vote for an outstanding clinical educator in each discipline (General/ Vascular and Echo/ Vascular). The clinical educators selected by the students are awarded the Gregory L. Spicer Outstanding Clinical Educator Award by the graduating class.

General Sonography Course Descriptions

NOTE: Course titles may vary based on the sponsor university, but content remains the same.

INTRODUCTION TO SONOGRAPHY

Course Description:

In this course the student will prepare for the new and challenging demands of sonography training in a hospital. Clinical policies and procedures are emphasized. Course content includes materials emphasizing personal adaptation skills and staff development issues, nursing procedures, ethics, and skills to become a better student. An overview of basic sonographic terminology, technique and equipment form the framework for future study. There is a lab component. A final written and practical exam is given. The student will have the opportunity to demonstrate their knowledge of sterile technique.

ABDOMINAL SONOGRAPHY I

Course Description:

Anatomy, physiology, pathology and pathophysiology seen on normal and abnormal sonograms of the chest cavity, peritoneal and retroperitoneal spaces, aorta and mesenteric vessels, and the liver will be discussed. Students will become familiar with the clinical symptoms, lab values and specific ultrasound protocols for normal and abnormal cases. Students will take both a written and practical final exam.

ABDOMINAL SONOGRAPHY II

Course Description:

Anatomy, physiology, pathology and pathophysiology seen on normal and abnormal sonograms of the kidneys, biliary system, pancreas, spleen, and interventional procedures will be discussed. Students will become familiar with the clinical symptoms, lab values and specific ultrasound protocols for normal and abnormal cases. Students will take both a written and practical final exam.

ABDOMINAL SONOGRAPHY III

Description:

Anatomy, physiology, pathology and pathophysiology seen on normal and abnormal sonograms of the adrenals, male pelvis, and pediatric specialty exams will be discussed. Students will become familiar with the clinical symptoms, lab values and specific ultrasound protocols for normal and abnormal cases.

SPECIALIZED SONOGRAPHY

Course Description:

In this course the student studies the embryology, structure, physiology and pathology of the breast, thyroid, and scrotum. Normal, abnormal gross, cross-sectional and relational sonographic anatomy will be explored. Invasive and intraoperative sonographic techniques will be discussed as they relate to breast, thyroid and scrotal sonography exams.

INTRODUCTION TO MUSCULOSKELETAL SONOGRAPHY

Course Description:

This course will introduce students to an array of musculoskeletal sonographic evaluations including anatomy, physiology and sonography protocols and procedures.

SONOGRAPHIC PHYSICS AND INSTRUMENTATION

Course Description:

The purpose of this course is to enable students to become familiar with the physical principles governing the of medical ultrasound equipment. Emphases will be on diagnostic imaging systems, but students also will become acquainted with therapeutic devices, including shock wave as well as thermal delivery systems. Basic principles of acoustic transmission and reflection in tissues are covered at an elementary level. Design and performance of transducers, pulse-echo imaging equipment, Doppler and color flow equipment and physical therapy systems are emphasized. The physics leading to image artifacts is described, as are methods for evaluating performance of ultrasound devices. Finally, acoustical exposure measurements and levels from diagnostic equipment are discussed, as well as biological effects and risk.

OB/GYN SONOGRAPHY I

Course Description:

This course focuses on the normal gross, relational and sonographic anatomy of the female pelvis. Included are discussions on gynecologic pathologies and infertility. Physiology and related laboratory and clinical findings for disease processes are emphasized related to the female pelvis. Students will complete both a written and practical final exam.

OB/GYN SONOGRAPHY II

Course Description:

The student will be understanding embryology, sonographic evaluation, and complications during the first trimester. Labor, fetal presentation and fetal anomalies as visualized on ultrasound during the second and third trimester will also be discussed. Students will become familiar with central nervous system anomalies, GI anomalies, GU anomalies, and musculoskeletal anomalies, anomalies associated with multiple gestations and placental pathology as they appear on ultrasound exams. Students will have the opportunity to practice biometric measurements on an obstetrical phantom during this course.

OB/GYN SONOGRAPHY III

Description:

This course will discuss the role of ultrasound in evaluating maternal complications in pregnancy, needle guidance procedures (CVS sampling, Amniocentesis, PUBS, therapy), and in monitoring high risk patients.

SEMINAR IN OB/GYN SONOGRAPHY

Description:

This course will discuss the role of ultrasound in evaluating the fetus for various genetic syndromes and understanding inheritance patterns. Advanced study of the fetal heart, to include normal anatomy and congenital heart disease will be discussed including embryology of the heart, the fetal echocardiography exam and protocols and congenital heart disease. This course also gives students a board review to assist in preparing to take the ARDMS OB/GYN specialty examination.

SONOGRAPHY CLINICAL EDUCATION I

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum I include abdominal imaging, OB/GYN imaging, and vascular technology. During this practicum, students will be assigned competencies and objectives to complete.

SONOGRAPHY CLINICAL EDUCATION II

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum II include abdominal imaging, OB/GYN imaging and vascular technology. During this practicum, students will be assigned competencies and objectives to complete.

SONOGRAPHY CLINICAL EDUCATION III

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum III include abdominal imaging, OB/GYN imaging and vascular technology. During this practicum, students will be assigned clinical competencies and objectives to complete.

SONOGRAPHY CLINICAL EDUCATION IV

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum IV include abdominal imaging, OB/GYN imaging and vascular technology. During this practicum, students will be assigned clinical competencies and objectives to complete.

SONOGRAPHY CLINICAL EDUCATION V

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum V include abdominal imaging, OB/GYN imaging and vascular technology. During this practicum, students will be assigned clinical competencies and objectives to complete.

SONOGRAPHY CLINICAL EDUCATION VI

Course Description:

Students are scheduled for clinical practicum at participating clinical education centers. Clinical experience rotations for Practicum VI include abdominal imaging, OB/GYN imaging and vascular technology. During this practicum, students will be assigned clinical competencies and objectives to complete.

VASCULAR SONOGRAPHY I

Course Description:

Hemodynamics of the arterial and venous vasculature will be discussed. Lower extremity venous normal and abnormal will be discussed. Extracranial and intracranial cerebrovascular anatomy, normal and abnormal will be discussed. Students will become familiar with the clinical symptoms and specific ultrasound protocols for normal and abnormal cases associated with lower extremity venous and cerebrovascular disease.

VASCULAR SONOGRAPHY II

Course Description:

Peripheral Vascular direct and indirect lower extremity arterial and upper extremity venous, normal and abnormal will be discussed. Students will become familiar with the clinical symptoms and specific ultrasound protocols for normal and abnormal cases associated with peripheral vascular disease.

VASCULAR SONOGRAPHY III - ABDOMINAL

Course Description:

A review of hemodynamics, abdominal, penile, and transplant organ Doppler, and vascular statistics will be discussed. Students will become familiar with the clinical symptoms and specific ultrasound protocols for normal and abnormal cases associated with vascular disease involving the above areas of interest.

SEMINAR IN ADVANCED MEDICAL IMAGING

Course Description:

The student will be exposed to normal anatomy and pathology cases combining diagnostic medical sonography, computed sonography and magnetic resonance imaging. The student will gain an understanding how a diagnosis is made, and patients are managed based on findings from multiple imaging modalities.

SEMINAR IN MANAGEMENT AND EDUCATION IN MEDICAL IMAGING

Course Description:

This course will familiarize the diagnostic medical sonography with educational and management issues in the profession. Students will problem solve management issues as they relate to diagnostic medical sonography and will explore educational strategies employed in ultrasound education. Students will participate in department quality assurance projects and educational course development projects.

SEMINAR IN PROFESSIONAL DEVELOPMENT

Course Description:

This course will familiarize the diagnostic medical sonography student with the history of the profession and professional societies associated with the field of diagnostic medical sonography. Students will learn how to be a professional and how to positively influence the field of diagnostic medical sonography. Students will also become familiar with resume creation and interviewing techniques.

INTRODUCTION TO NEUROSONOGRAPHY

Course Description:

This course will cover the anatomy, physiology, pathology, pathophysiology and the sonographic appearance of the normal and abnormal neonatal brain and spine. Students will become familiar with the normal ultrasound exam protocol and how to modify the exam for pathological conditions.

CLINICAL GRADING AND EVALUATION

Plan for Competency-Based Clinical Education

The UWHC campus serves as the sponsoring site for the Carroll University, Edgewood College, Marian University and University of Wisconsin-Milwaukee School of Diagnostic Medical Sonography didactic and clinical portion of the Bachelor of Science in Medical Sonography. The School of Diagnostic Medical Sonography offers a 24-month general and vascular sonography option and a 24-month echocardiography and vascular sonography option. The programs include didactic and clinical instruction in a format that integrates classroom teaching and hands-on clinical experience in the performance of sonography examinations. The school places great emphasis on clinical training in addition to a rigorous didactic curriculum. Students adhere to a weekly schedule that includes two, eight-hour days of classes and two to three, eight-hour days of clinical training (depending on the semester). Some of the courses, during certain semesters, require a scan lab. On those days, the student will either be in clinic for a half a day or will not be in clinic. This again is semester-based. Students prepare for clinical rotations by attending laboratory demonstrations of ultrasound equipment operation and patient examination methods. Scanning protocols are reviewed in didactic courses in both diagnostic medical sonography and echocardiography and demonstrated in scan labs that review protocols covered in class. All students are required to attend scan labs. It is voluntary for a student to be scanned during these labs. Students are required to perform competency examinations in a laboratory setting before they are eligible to complete the competency examinations required for graduation.

Clinical Grading

The UWHC School of Diagnostic Medical Sonography employs a “competency-based” approach to the clinical education of diagnostic medical sonography. Students must demonstrate skills and abilities that meet expectations outlined in the Program Objectives before they are eligible for graduation. The Program Objectives devised by the Program Director and Clinical Education Coordinators are designed to ensure that students have the ability to perform ultrasound examinations at competent levels by the end of their clinical training. Students must demonstrate knowledge of current scanning techniques in the field of medical sonography and ultrasound equipment manipulation before entering careers in the allied health profession.

The students' clinical performance will be evaluated using a set of criteria that incorporates data provided by clinical sites and review by the School of Diagnostic Medical Sonography Program Director and Clinical Education Coordinator. All the required clinical forms along with a complete description of correct use and deadlines may be found on the Diagnostic Medical Sonography Course web site (Canvas). The directions and deadlines contained on the Diagnostic Medical Sonography Course web site (Canvas) must be followed and it is the responsibility of the student to familiarize themselves with the contents of this web site. Failure to follow directions or meet deadlines for clinical paperwork will result in deductions and may adversely affect the student's clinical grade. A description of the clinical evaluation process is provided below.

1. **Clinical Facilities:** Students are required to successfully complete clinical practical exams with the School of Diagnostic Medical Sonography faculty as well as required clinical competency examinations at the clinical sites. Students are required to complete ultrasound examination competencies at School of Diagnostic Medical Sonography approved clinical sites for the diagnostic medical sonography and echocardiography programs.
 - a. Students will demonstrate to School of Diagnostic Medical Sonography faculty their ability to produce images of anatomic structures outlined by the clinical objectives provided by the Clinical Education Coordinator during scanning laboratory periods. Students will then complete, with a passing grade, a preliminary clinical competency under the supervision of School faculty. Upon successful completion of each preliminary clinical competency, students will be allowed to begin completion of their clinical competencies at their clinical sites.
 - i. If 80% is not earned on a preliminary competency the student will have to repeat the preliminary competency.
 - ii. 80% may be the highest grade earned when a preliminary competency is repeated.

- iii. If 80% is not earned on the second attempt at a preliminary competency an action plan will be created, and the student may be put on probation.
 - iv. At any point in a student's education the student may be asked by a clinical instructor or faculty member to re-demonstrate a preliminary competency. An action plan will be created, and the student will be tested again. If a passing grade of the preliminary competency is not earned a student may be placed on probation.
 - v. The above situations will be reviewed on a case by case basis.
 - b. Clinical instructors will observe the student during each scanning procedure undertaken at the facility. Students will successfully complete a set number of clinical competency examinations, under the supervision of the clinical instructors, prior to graduation. Both the preliminary clinical competencies and the clinical competencies will be scored automatically by the E-Value system and according to the following guidelines.
 - c. Clinical competencies and preliminary competencies are scored using a weighted scale.
 - i. The competencies are scored on a scale of 1 to 4. A score of four is given when a student is able to demonstrate the structure "Without Assistance". The total points assigned are then taken out of the total points possible. The total points possible vary by competency, since each competency has a different number of required objectives. If a certain objective is not part of a clinical site's protocol, that objective may be marked N/A and that objective will not be counted in the total possible.
 - ii. The final percentage of points attained out of points possible must be at least 80% for the competency to be accepted. Students who submit competencies that do not attain a grade of 80% or higher will be asked to repeat that competency.
 - d. Clinical evaluations are scored using a weighted scale.
 - i. For the first twelve weeks of the first semester, students will be graded on 5 objectives. Each behavior under the objectives is given a point value from 1 to 5 with 5 being the optimal behavior and the first behavior listed under each objective. A maximum of 20 points will be awarded for each of the 5 objectives. The total points awarded will then be divided by the total points possible which are 100. The resulting percentage must be at least 80% to be considered a passing grade. Failing grades will result in a clinical counseling session and disciplinary action according to the policy in the academic handbook.
 - ii. The last evaluation of the first semester and all evaluations for semesters two through six, the student will be graded on ten objectives with each objective receiving a point value from 1 to 5. The total points awarded will then be divided by the total points possible which are 50. The resulting percentage must be at least 80% to be considered passing. Failing grades will result in clinical counseling sessions and disciplinary action according to the policy in the academic handbook.
 - iii. Evaluations are due every four weeks throughout all six semesters. In rotations where the student receives more than one evaluation for a four-week time period, the percentages of all submitted evaluations for that time period will be averaged for that four-week session. 5 points will be deducted from the student's average clinical evaluation grade if the evaluation is not submitted by noon on the due date. (Please refer to clinical course syllabus for specific due dates.)
 - e. Upon completion of the required clinical competency examinations at the clinical sites, the students will complete a final clinical practical exam in each anatomical area, with School of Diagnostic Medical Sonography faculty. A passing grade on the final clinical practical examinations is required for graduation.
 - f. Students are expected to abide by the Professional Behavior Requirements and Professional Behavior Code adopted by the School of Diagnostic Medical Sonography. Students who fail to adhere to the codes of professional and ethical conduct will be subject to disciplinary action.
 - g. Students are expected to abide by the dress code outlined in the Professional Behavior Code adopted by the School of Diagnostic Medical Sonography when attending clinical training. Students who fail to adhere to the dress code will be subject to disciplinary action.
2. **School of Diagnostic Medical Sonography:** The student's clinical progress will be evaluated by the Program Directors, Clinical Education Coordinator and dedicated Cardiac Instructor, at mid-semester and end of the semester time intervals.

- a. Students will meet with the Program Director, and/or the Clinical Education Coordinator and/or the Cardiac Instructor every eight weeks while school is in session to discuss their progress in developing clinical skills, completion of clinical competencies, progress on protocol book, and review the clinical evaluations submitted by clinical instructors.
- b. Semester clinical grades will be determined by the Program Director, Clinical Education Coordinators and Faculty at the end of the sixteen-week semester. For semesters 1-4, the student's semester grade will be based on an average of:
 1. Clinical evaluations completed
 2. Preliminary clinical competency examinations
 3. Completed clinical competency examination score average
 4. Completed final clinical practical exams
- c. For semester 5, all preliminary competencies are completed, and no practical final is given, therefore those two areas are not averaged into the clinical grade for the fifth semester only. For semester 6, the preliminary competencies should all be completed by the sixth semester. Thus, the sixth semester clinical education grade is derived from averaging the clinical evaluation scores and the average of the clinical competencies.

Table 1: Clinical Grading

	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
1. Clinical Evaluations – evaluated by Clinical Instructors at Clinical Sites	20%	22.5%	22.5%	25%	50%	50%
2. Preliminary Clinical Competency Evaluations – evaluated by School Faculty in Lab setting.	20%	22.5%	22.5%	25%	N/A	N/A
3. Clinical Competency Average – evaluated by Clinical Instructors at Clinical Sites. A number of competencies may be assigned to students to complete to earn a grade of an A.	20% Must complete at least 5 competencies during 1 st Semester.	22.5% Must complete at least 30 competencies by the end of 2 nd semester	22.5% Must complete at least 50 competencies by the end of 3 rd semester.	25% Must complete at least 70 competencies by the end of 4 th semester	50% Must complete at least 95 competencies by the end of 5 th semester	50% All competencies must be complete by graduation
4. Final Clinical Practical Examinations – evaluated by School Faculty in Lab Setting. *	20%	22.5%	22.5%	25%	NA	NA
5. Weekly Grading for Lab -students are graded on preparedness for lab	20%	N/A	N/A	N/A	N/A	N/A
6. Cultural Competency - during clinical 2 a self-reflection paper is due -during clinical 3 a comprehensive CC paper is submitted	N/A	10%	10%	N/A	N/A	N/A

***Final Clinical Practical Examinations**

Throughout the duration of the program, students will be performing final clinical practical examinations with the School of DMS faculty. These examinations will consist of students scanning on structures and protocols covered over the duration of the appropriate semester. During the 3rd semester, all junior students will be evaluated on several different types of case studies.

All students will have vascular cases to review and analyze. General/vascular students will have abdominal, gynecological, and obstetrical cases. Echo/vascular students will have adult and pediatric echo cases. Students will go through a series of pathology images with patient histories and will need to correctly answer questions on these pathology cases. The School of DMS faculty will be assessing students on their performance for each case.

Clinical Sites and Supervision Policy

The length of clinical rotations and the clinical facilities included in the diagnostic medical sonography and echocardiography training programs are determined by School of Diagnostic Medical Sonography (See Tables 2 & 3). Students must participate in all clinical rotations mandated by the School of Diagnostic Medical Sonography. The Program Director and Clinical Education Coordinator provide clinical instructors at all clinical sites with constant updates regarding information covered in didactic classes that students are expected to apply to clinical training. Clinical instructors will evaluate students on their application of didactic information to clinical activities in the written evaluations that are sent to the Clinical Education Coordinator at the end of each clinical rotation. Students should contact the Clinical Education Coordinator with questions or concerns regarding their clinical grades.

Students at clinical sites shall not take the responsibility or place of qualified staff sonographers. Students are not to be paid for any clinical hours assigned by the UWHC School of Diagnostic Medical Sonography. The clinical instructors will implement the following guidelines in working with students:

1. Until a student has successfully completed the preliminary clinical competency and required clinical competencies for a given section, the clinical instructor shall use *Direct Supervision* in relation to the student. Direct supervision is defined as clinical instructor evaluation of the requisition, patient condition, and student performance for the duration of the exam. The clinical instructor must be physically present in the exam room while the student is scanning and review the examination with the student afterwards.
2. After a student has successfully completed the preliminary clinical competency and required clinical competencies for a given section, the clinical instructor, at their discretion and within the guidelines of the specific clinical site, may implement *Indirect Supervision* in relation to the student. Indirect Supervision is defined as having a clinical instructor within the immediate area to assist the student if needed. Under no circumstances should a student be assigned alone to an area. A clinical instructor should review all examinations with the student.

Echocardiography Clinical Sites

Students enrolled in the echocardiography option participate in clinical rotations that include time spent in echocardiography, cardiology, perinatal obstetric, vascular technology, and vascular surgery departments (see Table 2). Only one or two students are assigned to each clinical site during each rotation to provide students with individualized attention. Students are exposed to a wide variety of procedures, examination methods, and ultrasound equipment. The clinical sites included in the curriculum perform various types of ultrasound examinations on different patient population including adult, pediatric, fetal, inpatients, and outpatients. This ensures that students are exposed various types of ultrasound techniques and a wide range of patient pathologic conditions.

General Sonography Clinical Sites

Students enrolled in the general and vascular diagnostic medical sonography option participate in clinical rotations that include radiology, obstetric and gynecologic, vascular technology, and vascular surgery departments (see Table 3). Only one or two students are assigned to each clinical site during each rotation to provide students with individualized attention. Students are exposed to a wide variety of procedures, examination methods, and medical equipment. The clinical sites included in the curriculum perform various types of ultrasound examinations on different patient populations including adult, pediatric, fetal, inpatients, and outpatients. This ensures that students are exposed various types of ultrasound techniques as well as a wide range of patients and pathologic conditions.

Table 2 – Echocardiography Clinical Sites		
Clinical Site	Clinical Contact	Site Address
American Family Children's Hospital Pediatric Cardiology	608-890-8117	1675 Highland Avenue Madison, WI 53792
Beloit Hospital Ultrasound Department	Linda Pechnik RDCS, RVT 608-364-5110	1969 W. Hart Drive Beloit, WI 53511
Divine Savior Healthcare - Aspirus	Joshua Veglahn RDMS, RDCS 608-745-5020 or 608-745-5617	2817 New Pinery Road Portage, WI 53091
SSM Health Outpatient Center	Nicole Spicer RDCS, RVT 608-252-8284	700 S. Park Street Madison, WI 53715
SSM Health Monroe Clinic Cardiology Department	Kathy Gregersen RDCS 608-324-2209	515 22 nd Avenue Monroe, WI 53566
SSM Health St. Agnes Hospital	Kim Mayer RDCS, RDMS, RVT 920-926-4518	430 E. Division Street Fond du Lac, WI 54035
SSM Health Hospital Cardiology Department	Stacey Ragels RDCS 608-259-5417	707 South Mills Street Madison, WI 53715-0450
Swedish American Hospital/Heart Institute	Nina Proietti MSN, RN-BC 779-696-6163	1401 East State Street Rockford, IL 61104
Unity Point-Meriter Hospital Cardiology Department	Cara Thompson RDCS 608-417-7359	202 South Park Street Madison, WI 53715-1599
Unity Point-Meriter Heart and Vascular Institute Echo Lab	Cara Thompson RDCS 608-417-2100	2601 W. Beltline Hwy. Madison, WI 53713
UW Health Cardiovascular Imaging Lab at 1 South Park (1SP)	Mary Chivington RDCS, RCCS, RVT 608-263-9014	1 South Park Street Madison, WI 53715
UW Health Cardiovascular Imaging Lab at West Clinic		451 Junction Road Madison, WI 53717
UW Health Cardiovascular Imaging Lab at The American Center (TAC)		4602 Eastpark Blvd, Madison, WI 53718
UW Health Cardiovascular Imaging Lab at Research Park (RP)		621 Science Dr. Madison, WI 53711
UW Health Cardiovascular Imaging Lab at University Hospital (UH)		600 Highland Avenue Madison, WI 53792
Watertown Regional Medical Hospital	Monte McNeil RDMS, RDCS 920-262-4313	125 Hospital Drive Watertown, WI 53098
Wm S Middleton Veterans Hosp. Echocardiography Department	Adam Burtch RDCS 608-280-7003 or 608-256-1901, ext.11616	2500 Overlook Terrace Madison, WI 53705-2254
Wm S Middleton Veterans Hosp. Vascular Department	Tim Kennedy CCI, RVS 608-256-1901 ext: 12004	2500 Overlook Terrace Madison, WI 53705-2254

Table 3 – General Sonography Clinical Sites		
Clinical Site	Clinical Contact	Site Address
Aurora St. Luke's Hospital	Laura Sorenson, BS, RDMS, RVT or Jessica Peterburs, RDMS, RVT 414-649-6131	2900 W. Oklahoma Ave. Milwaukee, WI 53215
Beaver Dam Community Hospital	Rose Reeson Dobie, RDMS 920-887-4006 (Med Imaging) 920-887-5976 (Rose Dobie)	707 S. University Ave. Beaver Dam, WI 53916
Beloit Clinic	Alyssa Harrison, RDMS, RVT 608-364-2425	1905 Huebbe Parkway Beloit, WI 53511
Beloit Hospital Ultrasound Department	Alyssa Harrison, RDMS, RVT General Lab: 608-364-5682 Vascular Lab: 608-364-5110 (Linda Pechnik, RDCS) Reception: 608-364-5249	1969 W. Hart Drive Beloit, WI 53511
Divine Savior Healthcare	Carolyn Deeren RDMS, RVT 608-745-5022 or 608-745-5617	2817 New Pinery Rd. Portage, WI 53091
Fort Healthcare	Cathy Hovel (Manager) 920-568-5420	611 Sherman Ave. East Fort Atkinson, WI 53538
SSM Health - Dean East Clinic Ultrasound Department	Ericha Johnson RDMS, RVT 260-6230	1821 S. Stoughton Road Madison, WI 53716
SSM Health - Dean Fish Hatchery Clinic Ultrasound Department	Ericha Johnson MS, RDMS, RVT 608-252-8360	1313 Fish Hatchery Rd. Madison, WI 53715
SSM Health - Dean West Clinic Ultrasound Department	Ericha Johnson MS, RDMS, RVT 608-824-4265	752 North Highpoint Road, Madison, WI 53717
Monroe Clinic	Lori Runkle RDMS, RVT 608-324-1338	515 22 nd Avenue Monroe, WI 53566
SSM Health- St. Mary's Hospital	Tara Pechan RDMS, RVT 608-258-6955	707 South Mills Street Madison, WI 53715-0450
SSM Health-Fond Du Lac Regional Clinic (OB)	Rene Rosenbaum-Schlough RDMS, RDCS 920-926-8516	420 E. Division St. Fond du Lac, WI 54935
SSM Health- St. Agnes Hospital	Jane Morgen (AB, Br, Ob) RVT (Hospital) 920-926-5582	430 E. Division Street Fond du Lac, WI 54935
SSM Health – Ripon Medical Center	Denise Dedor (Manager) 920-745-3048	845 Parside St. Ripon, WI 54971
SSM Health-Waupun Memorial Hospital	Leah Buteyn RDMS (OB), RVT 920-324-6513	620 W. Brown Street Waupun, WI 53963
Swedish American Hospital	Nicole Sandoval, RDMS 815-489-4776	1401 E. State St Rockford, IL 61104
UnityPoint Health -	Mari Kramer RVT 608-417-2100	2601 W. Beltline Hwy. Madison, WI 53713

Meriter Heart & Vascular Institute		
UnityPoint Health-Meriter Medical Imaging	Holly Grunahl (Manager) 608-417-7166	202 South Park Street Madison, WI 53715-1599
UnityPoint Health-Meriter Center for Perinatal Care	Kelsey Lawton RDMS 608-417-6359	202 South Park Street Madison, WI 53715-1599
UW Health 1 S. Park Medical Imaging	Hailee Krall BS, RDMS, RVT 608-287-2060	1 South Park Street Madison, WI 53715
UW Health Odana Atrium Clinic	Hailee Krall BS, RDMS, RVT 608-287-2079	5618 Odana Rd. Madison, WI 53719
UW Health Union Corners Clinic General Imaging	Hailee Krall BS, RDMS, RVT 608-287-2079	2402 Winnebago Street Madison, WI 53704
UW Health Union Corners Clinic OB/GYN	Michelle Straus, RDMS 608-287-2079	2402 Winnebago Street Madison, WI 53704
UW Health 20 S. Park OB/GYN Department	Amy Nickels RDMS (Ab, Br), RVT 608-287-2833	20 South Park Street Madison, WI 53715
UW Health at the American Center (TAC)	Mindy Williams BS, RDMS, RVT, RSMSK, MSK 608-440-6609	4602 East Park Blvd. Madison, WI 53718
UW Health - American Family Children's Hospital	Dana Walker, BS, RDMS, RVT 608-890-7144	1675 Highland Ave. Madison, WI 53792
UW Health Digestive Health Center	Dana Walker BS, RDMS, RVT 608-890-5050	750 University Row Madison, WI 53705
UW Health Research Park -Musculoskeletal	Dana Walker, BS, RDMS, RVT 608-890-7689	621 Science Drive Madison, WI 53711
UW Health Breast Center	Dana Walker, BS, RDMS, RVT 608-262-6787	600 Highland Avenue Madison, WI 53792
UWHC Radiology	Dana Walker, BS, RDMS, RVT 608-262-5279	600 Highland Avenue Madison, WI 53792
UW Health East Clinic	Dana Walker, BS, RDMS, RVT 608-262-5279	5249 East Terrace Dr. Madison, WI 53718
UW Health at West Clinic	Mary Lee Chivington RDCS, RVT 608-263-4341	451 Junction Road Madison, WI 53717
UW Health - West OB	Karen Karns RDMS (608) 265-7601	451 Junction Road, Madison WI 53717
Watertown Regional Medical Center	Kendra Wilson RDMS, RVT 920-206-3070 (Center for Women's Health) 920-262-4488 (Hospital)	125 Hospital Drive Watertown, WI 53098
Wm S Middleton Veterans Hosp. Radiology Ultrasound Dept.	Julie Wuertzer-Wilde, RDMS 608-280-7070, ext. 17665	2500 Overlook Terrace Madison, WI 53705-2254
Wm S Middleton Veterans Hosp. Vascular Lab	Tim Kennedy, RVT 608-256-1901, ext. 12004	2500 Overlook Terrace Madison, WI 53705-2254

Use of Clinical Facility Resources

Students are only to use clinical resources, medical equipment, telephones, computers, and facsimile (FAX) machines for clinical use with the approval of a clinical instructor. If a student needs to make a personal phone call due to extenuating circumstances, they should ask to use a faculty office phone. Long distance phone calls are not to be made and billed to the hospital (with the exception of punching in and out from the clinical site). Ultrasound machines and medical testing equipment will only be used during scheduled scanning times determined by the clinical instructor, Program Director, or Clinical Education Coordinator.

- A. All ultrasound examinations and medical tests performed by students are limited to requested examinations on patients while under the supervision of a clinical instructor during a scheduled clinical rotation. Utilizing clinical equipment on non-patients without permission of the clinical instructor, Program Director, or Clinical Education Coordinator is strictly prohibited by the School of Diagnostic Medical Sonography. Students who use clinical equipment on non-patients are subject to disciplinary action.
- B. Any unauthorized use of ultrasound machines, medical equipment, and other facility resources by students is strictly prohibited by the School of Diagnostic Medical Sonography. Students who use clinical equipment without authorization are subject to disciplinary action.

Clinical Exposure Precautions

Throughout clinical training, students will perform ultrasound examinations that may expose them to blood and body fluids. The School of Diagnostic Medical Sonography requires all students to follow Universal Precautions when working with all patients. The following personal protection equipment should be used to protect students while in the clinical environment:

1. Gloves should be worn when contact is made with a patient or patient's personal effects.
2. Gloves should be worn when cleaning ultrasound machines, transducers, and other types of medical equipment in the examination room.

3. Facial masks should be worn when there is a possibility that blood or body fluids may be splashed into the mucus membranes of the face (i.e. nose and mouth area).
4. Eye protection should be worn when there is a possibility that blood or body fluids may be splashed into the eyes.
5. Protective gowns should be worn when there is a possibility that blood or body fluids may be splashed onto the student's clothing.
6. Gloves, facial masks, and gowns should be worn when working with patients under isolation precautions. The student should ask clinical instructors or other hospital/clinic personnel if there are questions about a patient's isolation status and which personal protective equipment is necessary.
7. In the event of an exposure to blood or body fluids, students should immediately report the event to their clinical instructors. Clinical instructors will guide the student in the exposure protocol at their site.
 - a. The incident should be reported to the Program Director and Clinical Education Coordinator as soon as possible after the event.
 - b. Students should submit a copy of all documentation obtained from the employee health office at the clinical site to the Program Director and Clinical Education Coordinator as soon as possible.
 - c. Students will work with the Program Director and Clinical Education Coordinator on all follow-up documentation needed after the exposure incident.

Clinical Rotation Physical Requirements

(see Technical Standards)

RULES FOR SPECIFIC CLINICAL SITES

Unity Point Health - Meriter Hospital

Airborne Pathogen Precautions: While in rotations at Meriter hospital, students are **not** to participate in patient procedures that would require them to enter a room of a patient who is been placed in airborne precautions.

While many of the students may have been fit tested for an N-95 respirator we do not have that documentation in Employee Health as they are not Meriter employees. OSHA Respiratory Protection standards require that employees be trained and fit tested with the type and brand of respirator that they are required to use. The type and brand of respirator the students may have been fit tested for may not be the particular type or brand of respirator that we use here at Meriter. Please note: students may participate in exams and procedures done in procedure rooms where the airborne patients are masked and will remain masked during the entire time they are out of their room.

Clinical Site Hours **0730 – 1600**

Echo Sites	General Sites
Beloit Memorial Hospital – Echo/Vasc Lab	Beloit Health System – Hospital only
SSM Health Outpatient Center – Madison	UW – Digestive Health Center
SSM Health Hospital – Madison	Beaver Dam Hospital
Unity Point–Meriter Hospital	Unity Point–Meriter Medical Imaging
Unity Point–Meriter Echo Beltline Clinic	Unity Point–Meriter Perinatology
VAH – Echo Lab	VAH – Medical Imaging
VAH – Vascular Lab	VAH – Vascular Lab

0700 – 1530 (GV & EV Sites)

SSM Health Waupun Memorial Hospital
SSM Health St. Agnes Hospital

0745 – 1615 (GV Sites)

Watertown Regional Medical Center – Hospital/Women’s Center

All other Clinical Site Hours are 0800 – 1630

PROFESSIONAL BEHAVIOR CODE

Conduct

Students enrolled in the University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography are expected to exhibit the highest standards of professionalism in academic and clinical settings. The discipline of diagnostic medical sonography requires its technologists to maintain unquestionable academic integrity and ethical standards when working with patients in clinical settings. Intellectual honesty, responsibility, and personal integrity are required by healthcare professionals in current medical facilities. Students who display improper behavior or lack of ethical standards in either their didactic classes or clinical rotations are subject to disciplinary action that may result in expulsion from the School of Diagnostic Medical Sonography.

Academic Conduct

Academic conduct that will not be tolerated includes:

1. Cheating on exercises, papers, and examinations.
2. Plagiarism on written exercises, presentations, and papers.
3. Facilitating plagiarism on written exercises, presentation, and papers.
4. Disrespectful attitude towards didactic instructors and guest lecturers.
5. Improper use of academic equipment (i.e. computers, internet access, video presentations, CD and DVD presentations, audio-visual equipment, library books and resources).

Clinical Conduct

Conduct that will not be tolerated in the clinical setting includes:

1. Completing official clinic reports and required paperwork without clinical instructors' approval.
2. Disrespectful attitude towards patients and/or their families, clinical instructors, or clinical staff.
3. Failing to follow HIPAA patient confidentiality laws.

4. Falsifying attendance records, competency or evaluation forms or any other program information.
5. Intentionally disregarding and/or disobeying instructions supplied by the clinical instructor during an examination, including:
 - a. Failing to follow the scanning methods appropriate to the examination being performed.
 - b. Failing to participate in an assigned examination.
 - c. Failing to cease scanning when directly told to stop by a clinical instructor.
 - d. Operating under the influence of drugs or alcohol
6. Physically or verbally abusing or mistreating patients, their families, or clinical staff
7. Sleeping or conducting personal business during clinic hours.
8. Stealing hospital or college property.
9. Using medical equipment (including ultrasound machines, vascular testing equipment, heart monitoring equipment, etc.) without the approval of a clinical instructor, Program Director, or Clinical Education Coordinator.
10. Using medical equipment (including ultrasound machines, vascular testing equipment, heart monitoring equipment, etc.) to perform examinations on persons without an official request for a medical test or approval of the clinical instructor, Program Director, or Clinical Education Coordinator.
11. Violation of UWHC Harassment Policy.

***** SHOULD A CLINICAL SITE ASK FOR A STUDENT TO BE REMOVED FROM THAT SITE BECAUSE OF UNSAFE PRACTICES OR UNPROFESSIONAL BEHAVIOR, THE STUDENT WILL BE DISMISSED FROM THE PROGRAM EFFECTIVE IMMEDIATELY.**

Disciplinary Actions

The purpose of disciplinary actions is to establish a uniform policy on disciplinary procedures and to identify areas of application. The best working conditions prevail when students conduct themselves with respect and consideration for themselves, their coworkers and their supervisors. Rules and regulations that are needed to provide for the safety, fairness and quality of education of all students must be enforced to be effective.

The following three steps are followed in our disciplinary action policy; 1) Counseling, 2) Probation (Academic or Clinical), and 3) Dismissal.

Counseling is defined as an immediate remedy utilized by the faculty to correct a student's conduct, performance, attendance, attitude, etc. Counseling will always be held confidential and conducted in a positive and constructive function. During the counseling session, the student will be given a set of learning objectives or behaviors to work on. If additional learning objectives are indicated, the student will be given a due date to have this completed by.

Probation is defined as a period of time from (4 weeks for clinical probation) to a semester (academic probation), during which the student's conduct, attitude and educational achievements will be closely observed by the faculty and other supervisory personnel. Students who fail to respond to correcting their deficiencies during their probationary period will be subject to dismissal from the program. All incidences resulting in probation will be documented and will become part of the student's permanent record.

Dismissal is defined as an immediate termination of a student for severe acts of misconduct or poor performance. Reasons for dismissal include, but are not limited to;

- Abusive treatment of patients or visitors
- Discrimination against anyone associated with the hospital because of race color or national origin
- Willful damage to hospital property
- Conduct likely to jeopardize the normal and efficient operation of the hospital
- Threatening, intimidating or coercing other hospital personnel
- Unauthorized possession of any type of weapon on hospital premises
- Being under the influence of drugs, narcotics or intoxicants while on duty
- Theft, pilfering, fraud or other forms of dishonesty
- Insubordination or refusal to perform duties assigned
- Absence without cause or authorization
- Disorderly conduct or fighting on hospital premises
- Malicious gossip or derogatory remarks concerning anyone associated with the hospital
- Unauthorized disclosure of confidential information
- Falsifying of hospital records, including false recording of time worked
- Other forms of immoral, unethical or grossly improper conduct

Dress Code

Students enrolled in the University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography are expected to be following the clinical dress code as stated by the UWHC Dress Code found on the U-Connect website. Students will follow the dress code for any non-UW Health sites when they are at those clinical rotations. Students that do not adhere to the dress code are subject to disciplinary action that may result in expulsion from the School of Diagnostic Medical Sonography.

Clinical Dress Code Requirements

1. Solid color navy blue scrubs to attend clinical rotations.
2. Closed-toed shoes should be worn to all clinical sites.
3. Students must wear their ID badges always (clinical and class days other than at the PSC building).
4. Dress worn to clinical rotations shall be clean, in good condition, fit appropriately, and without extensive wrinkling.
5. Students will maintain an acceptable level of personal hygiene and grooming standards that are conducive to healthcare professionals.
6. Students will limit jewelry to rings, necklaces, and earrings. Other types of facial jewelry are prohibited as they may be offensive to patients.
7. Students will appropriately cover all visible body art (i.e. tattoos) as they may be offensive to patients.
8. Hair should be clean and professional in appearance.
9. In patient contact situations, long hair must be controlled to prevent contact with the patient, equipment or supplies.
10. Control of beards and mustaches will be coordinated by individual departments, if they affect or interfere with job performance and/or safety.
11. Strong smelling cologne, perfume, scented lotions and/or powders should not be worn. Any complaints regarding excessive fragrances will be quickly resolved by the leader in consultation with Employee Relations.
12. Direct caregivers are not permitted to wear artificial nails (any nail other than the natural nail is considered an artificial nail. This includes acrylic nails which are adhered to the underlying natural nail, extensions, tips, gel overlays, resin wraps, and bindings). Refer to UW Health Clinical Policy 4.1.13, Hand Hygiene.

Dress Code for Didactic Classes

1. Students must wear attire that is appropriate for our professional learning environment.
2. No hats or hoods.
3. Dress worn shall be clean, in good condition, fit appropriately, and does not expose undergarments.
4. Students will maintain an acceptable level of personal hygiene and grooming standards that are conducive to healthcare professionals.

Dress Code for Presentations, Guest Lectures, and lectures at the HSLC or CSC

Students are expected to dress appropriately and professionally for presentations. This includes, but is not limited to: student led presentations, case study presentations, educational demonstrations, and guest/physician lecture presentations. Any time the student is required to speak in front of their peers, faculty, or hospital/medical staff, these guidelines must be followed. Appropriate and professional dress includes the following: all shirts with collars, business casual crewneck or V-neck shirts, blouses, golf and polo shirts, casual slacks and trousers. Jeans are acceptable if they are of a dark wash with no holes. Examples of inappropriate shirts include T-shirts, shirts with inappropriate slogans, tank tops, muscle shirts, camouflage and crop tops. Examples of inappropriate pants include shorts (except for walking-length shorts), camouflage, pants worn below the waist or hip line, and pants/jeans with holes.

STUDENT INFORMATION

FINANCIAL AID

Students should follow the policies for applying for financial aid specific to their sponsor university.

Health Requirements and Health Insurance

1. Applicants must have a physical completed by University of Wisconsin Hospital and Clinics (UWHC), at no cost to the student, prior to start date. They must be screened by Employee Health Services and be able to meet the physical requirements of the training.
2. The UWHC School of DMS provides students with access to basic health care services via the University of Wisconsin University Health Service (UHS). Rates and services available through UHS may be viewed at <http://www.uhs.wisc.edu>. UWHC School of DMS contracts with UHS so that program students pay UW-Madison student rates for UHS health services.
3. Students may purchase supplemental health insurance coverage on their own if they wish.
4. Students must make an appointment prior to seeing medical professionals at UHS. University of Wisconsin University Health Service is located on the 5th – 8th floor of 333 East Campus Mall, Madison, WI. Services available through UHS may be viewed at <http://www.uhs.wisc.edu>.
5. University of Wisconsin Hospital and Clinics (UWHC) Employee Health Services will treat students free of charge who become ill or injured while on clinical duty at a UWHC hospital or clinical site.
6. Students utilizing UWHC Emergency Services for medical treatment will be billed for those services.

Housing

Students are responsible for providing their own room and board during the duration of the general/ vascular sonography option and/or echocardiography/ vascular sonography option. The University of Wisconsin Campus Assistance Center can aid students to locate rental housing (houses, apartments, boarding houses, and rooms in private residences) online at <http://housing.civc.wisc.edu/>. The UW Campus

Assistance Center is located at the address provided below:

Campus Assistance Center
University of Wisconsin-Madison
1308 W. Dayton St.
Union South
Madison, WI 53715
(608) 263-6400

Internet Information

The University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography has an internet webpage that is linked to the University of Wisconsin Hospital & Clinics website www.uwhealth.org/ultrasoundschool.

In addition, the Commission on Accreditation of Allied Health Education Programs (CAAHEP) provides information about all accredited ultrasound training programs located within the United States on its website www.caahep.org. Additional information about careers in diagnostic medical sonography can be obtained on the Society of Diagnostic Medical Sonography website www.sdms.org.

Additional information about these degree programs may be accessed at:

Carroll University: www.carrollu.edu

Edgewood College: <http://www.edgewood.edu/>

Marian University: www.marianuniversity.edu

Universities of Wisconsin - Milwaukee, LaCrosse, and Oshkosh: www.uwm.edu/chs

Other Expenses

Students in both the general sonography and echocardiography options are required to participate in clinical training rotations through a variety of hospitals and clinics located in the city of Madison and southeastern Wisconsin. While all clinical sites within Madison are accessible by public transportation bus service, sites outside the Madison area may only be accessible by private automobile. Students are responsible for their own transportation to these outlying sites. Those who wish to park in parking lots located at or near clinical sites are may be required to pay a fee. Some clinical sites may require a badging and/or an onboarding fee. Some examples below:

- \$10 Meriter Badge - refundable at the end of the program upon return
- \$10 Divine Savior Healthcare - NON refundable - on boarding fee
- St. Mary's medical imaging and perinatology require black scrubs OR surgical scrubs. The surgical scrubs are free.

Students that are in the general/vascular sonography and echocardiography/vascular sonography options are required to wear a uniform of navy-blue scrubs to clinical sites. Therefore, students are responsible for providing their own uniforms.

All students are also required to become student members of the Society of Diagnostic Medical Sonography (SDMS) and the South-Central Wisconsin Ultrasound Society (SCWUS). The fee for the SDMS is \$45.00 per year and the SCWUS \$35.00 per year.

Student Life in Madison

The University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography is located on the western side of the University of Wisconsin-Madison campus on the shore of Lake Mendota in Madison, Wisconsin. The City of Madison supports a broad range of cultural events including concerts, exhibitions, plays, movies, and entertainment facilities that are available at prices compatible with a student's budget.

The City of Madison has a well-developed public transportation system, with bus services that

traverse the city and surrounding areas. Opportunities for outdoor recreation both in the city and in the nearby countryside are plentiful. The University of Wisconsin maintains a 1240-acre arboretum that contains 25 miles of walking trails. Popular regional outdoor activities include sailing, hiking, ice-skating, cross-country skiing, bicycling, hunting, and fishing.

Textbooks

Textbooks are required and recommended by the University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography. A textbook list will be sent to students with the information packets included with welcome letters. Students should plan to spend up to \$2,500.00 for required textbooks. All textbooks may be purchased on-line or at the University Bookstore located within the Health Sciences Learning Center, 750 Highland Avenue, Madison, WI.

TUITION

Tuition is billed and paid directly to the student's sponsor university. Tuition is assessed by the number of credit hours for which the student is registered.

***Tuition rates are subject to change. Applicants should contact their sponsor university for updated tuition information.*

Tips for Appropriately Using Social Networking Websites

Social networking websites provide unique opportunities for students to get to know one another, share experiences and keep in contact. As with any public forum, it is important that users of these sites are aware of the associated risks and act in a manner that does not embarrass the students, faculty, DMS Program, UWHC or the clinical affiliates of the UWHC-School of DMS.

It is important to ensure patient information is not publicly available.

The School of DMS has adopted the following guidelines to assist students in safely using these sites.

A. Personal Privacy

1. We recommend setting your profiles on social networking sites so that only those individuals whom you have provided access may see your personal information.
2. We recommend evaluating photos of yourself that are posted to these sites and removing tags from photos that depict you in what may be construed as compromising situations.
3. Be sure you are aware of the security and privacy options available to you at any sites where you post personal information. Keep in mind that privacy settings are not impervious, and information can be shared willingly and unwillingly with others, even with “friends only” access.

B. Protection of Patient Information

1. Comments made on social networking sites should be considered the same as if they were made in a public place.
2. HIPAA rules apply online, and students may be held criminally liable for comments that violate HIPAA.
3. Remember that simply removing the name of a patient does not make them anonymous. Family members or friends of that patient or other patients you are caring for may be able to determine who you are by referring to context.

C. Professionalism

1. Use of these sites can have legal ramifications. Comments made regarding care of patients or that portray you or a colleague in an unprofessional manner can be used in court or other disciplinary proceedings.
2. Statements made under your profile are attributable to you and are treated as if you verbally made the statement in a public place.
3. Keep in mind that photographs and statements are made potentially viewable by future employers. Some employers are now using social networking websites to check on potential employees as a means of a background check.
4. Students may be subject to disciplinary actions within the School of DMS for comments that are either unprofessional or violate patient policy.
5. Students must adhere to the Code of Ethics for the Profession of Diagnostic Medical Sonography.
<http://www.sdms.org/about/codeofethics.asp>

Twitter – Closed UWHC School of DMS Account

A method of communication for our students and faculty. Only follow students and faculty that are currently associated with our program. Create a separate account if you have a personal Twitter account.

- Used for communication regarding your clinical and didactic education.
- Students often share exciting news, like passing board exams.
- Faculty may Tweet you last minute information about classes, clinical, and school closure during inclement weather.

Guidelines:

- Use Twitter as it is intended for our program.
- Appropriate hours to Tweet 6 am to 10 pm Monday thru Friday
- You may Tweet instructors outside of this time frame if it's emergent
 - Urgent examples: sickness, late to clinical or class, or family emergency

Email

- Always use UWHC email to communicate with faculty or administrative assistant
- Faculty will respond to emails within 24 hours during weekdays, providing they are not on vacation
- Students may email faculty at any time of day or night, with the understanding that faculty will not respond always right away or at all on weekends
- If you have an emergent issue please Tweet the appropriate faculty member, clinical education coordinator, or program director